# **Alaska ETT to EMT-I Bridge Course**

# Course Guide

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# **Course Guide**

#### Intent

This program was designed to allow the ETT to progress to EMT-I certification in an efficient manner. It credits the ETT with the knowledge and skills learned in primary training. The content is flexible and should be customized to address those areas which are new or require remediation. This 80 hour minimum length class meets the Alaska EMT-I objectives as set in regulation. Successful completion of this program will allow the student to take the State of Alaska EMT-I certification examination and the National Registry of Emergency Medical Technicians EMT-B examination.

#### **Student selection**

Students who will likely be able to complete the program with minimal remediation should be given priority in the selection process. This includes those who have been registered ETTs for several registration periods, those that produced high scores in the initial ETT program and those with other medical training (i.e. CHA/P).

The ideal student for this program has mastery of ETT knowledge and skills, is self directed, and is attending by choice. Students other than this ideal may be admitted. The instructor must recognize the characteristics of the learner and customize the program accordingly.

Pretesting should also be considered when selecting students. Significant remediation may be required for students with poor outcomes on the written and practical pretests. The expectation is not that of perfect performance. Candidates who score 70% or greater on the written and practical admission assessments will be best suited for the bridge course. Those with low scores on the pretests may be remediated and admitted to this program upon demonstration of acceptable ETT level skills and knowledge.

It is ideal that classes be held for groups with similar training and backgrounds. An "open" ETT bridge course will necessitate remediation on possibly all topic areas. This will greatly increase class time and student frustration. Consider assembling classes based on work site, nature of EMS activity, groups who initially trained together or from the same instructor. The bridge course instructor may also wish to group classes based on pretesting scores.

#### Admission

#### Testing:

A 100 question written evaluation (see appendix a) will be administered to each candidate no later than one month before class to allow identification of deficiencies in core ETT knowledge. This advance period will promote an individualized curriculum focusing on the strengths and weaknesses of the class.

The pretest is organized by topic according to the ETT learning objectives. The instructor should compile the test results for the class and identify which areas the students are strongest and weakest. The course hours may then be assigned to minimize redundancies and focus on deficiencies.

Practical skills will also be assessed before the course. Each student must test the following stations: patient assessment, splinting, bleeding control and shock management, airway management and spinal immobilization. Materials for the skills test are in appendix B of this course guide.

Candidates should be briefed that these examinations will be used to customize the class and are not for certification purposes or other formal use. This should reduce test anxiety and allow a surer measure of knowledge and skill retention.

#### **Prerequisites:**

- Completion of a basic cardiopulmonary life support class. This class must provide for knowledge and skill development in the following areas: adult, child, and infant CPR, airway obstruction relief maneuvers in the above populations and two-rescuer CPR. This training may be held when the group meets for the transition course.
- Only those who have current ETT credentials on the first day of the bridge class will be admitted.

# Course scheduling and length

The ETT bridge course will be no less than 80 hours. This may be distributed over any timeframe within one year. It is likely that a class of ten eight-hour days will be the most common method of scheduling this program. Class days should be scheduled for no longer than eight instructional hours. Classes that run all day and through the evening increase pressures on the student and leave little time for study and assimilation. They should therefore be avoided. To minimize the stress on students, a break day in the middle or towards the end of the class should be strongly considered.

As stated above, the bridge class is intended to be customized. Instructors should analyze pretest results and schedule topics to focus on areas of deficiency and introduce new material. The learning objectives in this course guide have been coded to help the instructor schedule the class. All objectives with an "R" in the number and those that are normally formatted must be taught. Those in gray may be taught according to learner needs.

This guide provides a topic breakdown and lists suggested hours for each topic from both the DOT national standard curriculum and the bridge course pilot program. Instructors are free to use this standard model or adapt it according to class need. Generally, if changes are made, they should increase, not reduce time devoted to teaching the objectives.

Students who learned the optional objectives (O<sub>2</sub>, PASG, Childbirth, EMS operations, traction splinting) in ETT training, may be reluctant to "relearn" these topics. Instructors will need to consider these "advanced" students and accommodate their needs.

Adult learners learn best by doing, not being told what to do. The instructor should keep this principle as the highest priority when scheduling the class. The majority of

class time should be devoted to student practice and scenarios. Lecture time must be minimized if students are to learn and retain the bridge course material.

#### **Policies**

Instructors must develop written course policies and distribute them to students before class starts. Items like attendance, participation, course completion, and problems should be addressed. Instructors may use or modify the sample EMT-I course syllabus developed and distributed by the State office.

#### Regulations

Instructors and students are advised that all regulations and policies must be adhered to for this program as with any EMT training in Alaska.

EMT training in Alaska is set in regulations 7 AAC 26.010 - 7 AAC 26.170 Emergency Medical Technicians and Emergency Medical Technician Instructors.

The regional and subregional EMS offices work with the EMS Unit to administer certification testing. Instructors should notify the regional EMS council when planning a bridge course. The regional office will help coordinate advertising, notifications, testing and other activities.

#### **Course Materials**

Students should be provided with the following materials for this class.

- Syllabus
- Copy of learning objectives
- EMT-Basic Textbook
- Guide for EMTs in Alaska
- Alaska EMS Skill Sheets
- Cold Injuries Guidelines
- Trauma Guidelines
- Instructor and course evaluations

#### Curriculum

As with all EMT-I courses in Alaska, the curriculum for this program must incorporate the objectives of the United States Department of Transportation, National Standard Curriculum Emergency Medical Technician: Basic, 1994

Instructors may use the Curriculum for ETT Bridge Classes or a modification of the DOT NSC to support the objectives of the ETT to EMT bridge class.

# Learning objectives

#### Overview

The learning objectives in this document are intended to guide the EMT-1 instructor and student in transitioning from ETT registration to EMT-1 certification. These objectives are a subset of the EMT-1 learning objectives, modified to accommodate expected competencies from initial ETT training. They are intended to be used in conjunction with the ETT and EMT-1 learning objectives published by the State of Alaska. The objectives contained in this document alone do not satisfy either the State of Alaska or NHTSA curricula for initial EMT-1(B) training. Therefore, instructors and students must understand that this set of objectives is to be used solely for transition training. Together with the ETT learning objectives, all objectives for Alaska EMT-1 and or NHTSA EMT-B are covered. Upon completion of the transition course, the candidate must be prepared to meet all of the learning objectives listed in the State of Alaska EMT-1 objectives.

Because of the customized nature of ETT training, objectives that may have been taught as an optional ETT subject are listed in this set. For example, many ETT students learn oxygen administration and use of basic mechanical airways. These objectives are also detailed here. However, this class is designed to transition the generic ETT student. If this material is new, the recommended time should at a minimum be used to teach this topic. If this material is a review, enough time should be taken to ensure the student has met the learning objectives. Every ETT- to EMT bridge class must at a minimum, be 80 hours in length.

In recognition of the critical nature of certain topics (e.g. airway management) some material that is always taught in an ETT class is also given a full set of learning objectives for the transition. Time spent on these topics will vary according to the class make-up. Regardless of time spent teaching, the instructor must ensure that all students meet the standards.

Objectives are formatted as follows:

- Material that must be taught in detail is formatted normally
- Material that must be reviewed is indicated by an "R" after the learning objective
- Material that the ETT should be competent in is gray.
- Alaska Specific objectives are italicized

Each objective is followed by an objective type and level identifier, e.g. "C-1."

- C Cognitive
- A Affective
- P Psychomotor

The numbers following the objective indicate the level of mastery required.

- 1 Knowledge
- 2 Application
- 3 Problem solving.

#### **Important Notes:**

- ♦ EMTs are expected to be able to perform the skills as outlined in the Alaska Skill Sheets. The EMT Instructor should review each lesson carefully and determine whether there are skills contained within the Skills Sheets which are required to be taught. For the sake of brevity, the requirement that relevant skills be taught, practiced, and mastered is implicit in each section of these objectives.
- ♦ In the previous version of this document, there was an objective at the end of nearly every section which required students to practice the completion of a patient encounter form (run sheet) for that particular type of assessment finding. Most of these objectives were deleted from this version. The instructor is responsible for ensuring sufficient lecture and practice has been provided to enable students to accurately complete the forms.

#### **Comments:**

Instructors are encouraged to comment on this curriculum. Comments should be directed to your EMS Training Committee Representative or the Section of Community Health and EMS.

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# **Introduction to Emergency Medical Care**

Recommended minimum time to complete: One hour

#### Cognitive Objectives

1-1.1

At the completion of this lesson, the EMT-I student will be able to:

- 1-1.2 Differentiate the roles and responsibilities of the EMT-I from other prehospital care providers. (C-3)
- 1-1.3 Describe the roles and responsibilities related to personal safety. (C-1)

Define Emergency Medical Services (EMS) systems. (C-1)

- 1-1.4 Discuss the roles and responsibilities of the EMT-I towards the safety of the crew, the patient and bystanders. (C-1)
- 1-1.5 Define quality improvement and discuss the EMT-I's role in the process. (C-1)
- 1-1.6 Discuss the importance of physician medical direction to an EMS System. (C-1)
- 1-1.7 Define medical direction and discuss the EMT-I's role in the process (C-1)
- 1-1.8 State the specific statutes and regulations in your state regarding the EMS system. (C-1)
- 1-1.9 *Define "delegation of authority.*

#### Affective Objectives

- 1-1.8 Assess areas of personal attitude and conduct of the EMT-I. (A-3)
- 1-1.9 Characterize the various methods used to access the EMS system in your community. (A-3)

#### **Psychomotor Objectives**

No psychomotor objectives identified.

# Well-Being of the EMT-I

Recommended minimum time to complete: One hour

# Cognitive Objectives

At the completion of this lesson, the EMT-I student will be able to:

1-2.0	Discuss the importance of EMT personal injury prevention.	
1-2.1	List possible emotional reactions that the EMT-I may experience when faced with trauma, illness, death and dying. (C-1)	
1-2.2	Discuss the possible reactions that a family member may exhibit when confronted with death and dying. (C-1)	
1-2.3	State the steps in the EMT-I's approach to the family confronted dying. (C-1)	
1-2.4	State the possible reactions that the family of the EMT-I may exhibit due to their outside involvement in EMS. (C-1)	
1-2.5	Recognize the signs and symptoms of critical incident stress. (C-1)	
1-2.6 R	State possible steps that the EMT-I may take to help reduce/alleviate stress. (C-1)	
1-2.7	Explain the need to determine scene safety. (C-2)	
1-2.8	Discuss the importance of body substance isolation (BSI). (C-1)	
1-2.9 R	Describe the steps the EMT-I should take for personal protection from air-borne and bloodborne pathogens. (C-1)	
1-2.10	List the personal protective equipment necessary for each of the following situations: (C-1)	
1-2.11	Hazardous materials Rescue operations Violent scenes  - Exposure to bloodborne pathogens Violent scenes - Exposure to airborne pathogens  Describe the minimum requirements for hazardous materials training for EMS personnel as outlined in Alaska Administrative Code (q)(6)(A). (C-1)	
1-2.12	Describe the effects of the Ryan White Act on EMS personnel. (C-1)	
1-2.13	Describe the requirements for EMS personnel outlined in the Alaska Bloodborne Pathogen regulations. (C-1)	
1-2.14	Describe the local, or typical, process for an EMT to report what he or she believes to be a significant exposure to potentially infectious fluids.	
1-2.15	Describe the requirements for EMS personnel outlined in the Centers for Disease Control's tuberculosis guidelines. (C-1)	
1-2.16	Describe the training and scope of certified activities for Emergency Trauma Technicians, Emergency Medical Technicians-I, II and III, Defibrillator Technicians, and Mobile Intensive Care Paramedics. (C-1)	

# Affective Objectives

1-2.17 Explain the rationale for serving as an advocate for the use of appropriate protective equipment. (A-3)

- 1-2.18 Given a scenario with potential infectious exposure, the EMT-I will use appropriate personal protective equipment. At the completion of the scenario, the EMT-I will properly remove and discard the protective garments. (P-1,2)
- 1-2.19 Given the above scenario, the EMT-I will complete disinfection/cleaning and all reporting documentation. (P- 1,2)

# Medical/Legal and Ethical Issues

Recommended minimum time to complete: One hour

#### Cognitive Objectives

At the completion of this lesson, the EMT-I student will be able to:

- 1-3.1 Define the EMT-I scope of practice. (C-1)
   1-3.2 Discuss the importance of Do Not Resuscitate [DNR] (advance directives) and local or state provisions regarding EMS application. (C-1)
- 1-3.3R Define consent and discuss the methods of obtaining consent. (C-1)
- 1-3.4 Differentiate between expressed and implied consent. (C-3)
- 1-3.5 Explain the role of consent of minors in providing care. (C-1)
- 1-3.6R Discuss the implications for the EMT-I in patient refusal of transport. (C-1)
- 1-3.7 Discuss the issues of abandonment, negligence, and battery and their implications to the EMT-I. (C-1)
- 1-3.8 State the conditions necessary for the EMT-I to have a duty to act. (C-1)
- 1-3.9 Explain the importance, necessity and legality of patient confidentiality. (C-1)
- 1-3.10 Discuss the considerations of the EMT-I in issues of organ retrieval. (C-1)
- 1-3.11 Differentiate the actions that an EMT-I should take to assist in the preservation of a crime scene. (C-3)
- 1-3.12 State the conditions that require an EMT-I to notify local law enforcement officials. (C-1)
- 1-3.13 List the injuries and suspicions which must be reported in Alaska, the time frames and format for reporting, and to whom the reports must be made. (C-1)
- 1-3.14 State the responsibilities of an EMT to determine whether a patient who has died is an organ donor. (C-1)
- 1-3.15 Describe the "Alaska Comfort One" DNR system in Alaska, including the valid forms of identification and the rescuer's response to a patient with a valid do-not resuscitate order.
- 1-3.16 List the prerequisites and procedures for pronouncing death in the field. (C-1)
- 1-3.17 Identify the roles and responsibilities of an emergency medical technician authorized under 7 AAC 26.040 and AS 18.08.075. (C-1)
- 1-3-18 List the suspicions of abuse and neglect of children, elders, and disabled adults which must be reported, to whom the reports are made, the process for making the report, and the alternatives if immediate assistance is required to prevent injuries or further harm. (C-2)

# Affective Objectives

- 1-3.19 Explain the role of EMS and the EMT-I regarding patients with DNR orders. (A-3)
- 1-3.20 Explain the rationale for the needs, benefits and usage of advance directives. (A-3)
- 1-3.21 Explain the rationale for the concept of varying degrees of DNR. (A-3)

# Psychomotor Objectives

No psychomotor objectives identified.

# The Human Body

Recommended minimum time to complete: 1.5 hours

# Cognitive Objectives

At the completion of this lesson, the EMT-I student will be able to:

- 1-4.1 Identify the following topographic terms: medial, lateral, proximal, distal, superior, inferior, anterior, posterior, midline, right and left, mid-clavicular, bilateral, mid-axillary. (C-1)
- 1-4.2 R Describe the anatomy and function of the following major body systems: respiratory, circulatory, musculoskeletal, nervous and endocrine. (C-1)

#### Affective Objectives

No affective objectives identified.

### **Psychomotor Objectives**

No psychomotor objectives identified.

# **Baseline Vital Signs and Sample History**

Recommended minimum time to complete: 1.5 hours (30 minute review, one hour dedicated skills practice)

# Cognitive Objectives

At the completion of this lesson, the EMT-I student will be able to:

1-5.1	Identify the components of the extended vital signs. (C-1)	
1-5.2	Describe the methods to obtain a breathing rate. (C-1)	
1-5.3 R	Identify the attributes that should be obtained when assessing breathing. (C-1)	
1-5.4	Differentiate between shallow, labored and noisy breathing. (C-3)	
1-5.5	Describe the methods to obtain a pulse rate. (C-1)	
1-5.6 R	Identify the information obtained when assessing a patient's pulse. (C-1)	
1-5.7 R	Differentiate between a strong, weak, regular and irregular pulse. (C-3)	
1-5.8 R	Describe the methods to assess the skin color, temperature, condition (capillary refill in infants and children). (C-1)	
1-5.9	Identify the normal and abnormal skin colors. (C-1)	
1-5.10	Differentiate between pale, blue, red and yellow skin color. (C-3)	
1-5.11	Identify the normal and abnormal skin temperature. (C-1)	
1-5.12	Differentiate between hot, cool and cold skin temperature. (C-3)	
1-5.13 R	Identify normal and abnormal skin conditions. (C-1)	
1-5.14	Identify normal and abnormal capillary refill in infants and children. (C-1)	
1-5.15	Describe the methods to assess the pupils. (C-1)	
1-5.16 R	Identify normal and abnormal pupil size. (C-1)	
1-5.17	Differentiate between dilated and constricted pupil size. (C-3)	
1-5.18	Differentiate between reactive and non-reactive pupils and equal and unequal pupils. (C-3)	
1-5.19 R	Describe the methods to assess blood pressure. (C-1)	
1-5.20	Define systolic pressure. (C-1)	
1-5.21	Define diastolic pressure. (C-1)	
1-5.22	Explain the difference between auscultation and palpation for obtaining a blood pressure (C-1)	
1-5.23	Identify the components of the SAMPLE history. (C-1)	
1-5.24	Differentiate between a sign and a symptom. (C-3)	
1-5.25	State the importance of accurately reporting and recording the baseline vital signs. (C-1)	
1-5.26	Discuss the need to search for additional medical identification. (C-1)	

#### Affective Objectives

Explain the value of performing the baseline vital signs. (A-2)

Recognize and respond to the feelings patients experience during assessment. (A-1)

Defend the need for obtaining and recording an accurate set of vital signs. (A-3)

Explain the rationale of recording additional sets of vital signs. (A-1)

Explain the importance of obtaining a SAMPLE history. (A-1)

- 1-5.32 R Demonstrate the skills involved in assessment of breathing. (P-1,2)
- 1-5.33 R Demonstrate the skills associated with obtaining a pulse. (P-1,2)
- 1-5.34 R Demonstrate the skills associated with assessing the skin color, temperature, condition, and capillary refill in infants and children. (P-1,2)
- 1-5.35 Demonstrate the skills associated with assessing the pupils. (P-1,2)
- 1-5.36 R Demonstrate the skills associated with obtaining blood pressure. (P-1,2)
- 1-5.37 Demonstrate the skills that should be used to obtain information from the patient, family, or bystanders at the scene. (P-1,2)

# **Lifting and Moving Patients**

Recommended minimum time to complete: Two hours (one hour demonstration/review, one hour dedicated skills practice)

#### Cognitive Objectives

At the completion of this lesson, the EMT-I student will be able to:

- 1-6.1 Define body mechanics. (C-1)
- 1-6.2 Discuss the guidelines and safety precautions that need to be followed when lifting a patient. (C-1)
- 1-6.3 Describe techniques for safely lifting cots and stretchers. (C-1)
- 1-6.4 Describe the guidelines and safety precautions for carrying patients and/or equipment. (C-1)
- 1-6.5 Discuss one-handed carrying techniques. (C-1)
- 1-6.6 Describe correct and safe carrying procedures on stairs. (C-1)
- 1-6.7 State the guidelines for reaching and their application. (C-1)
- 1-6.8 Describe correct reaching for log rolls. (C-1)
- 1-6.9 State the guidelines for pushing and pulling. (C-1)
- 1-6.10 Discuss the general considerations of moving patients. (C-1)
- 1-6.11 R State three situations that may require the use of an emergency move. (C-1)
- 1-6.12 Identify the following patient carrying devices:
  - Wheeled ambulance stretcher
- Scoop stretcher
- Flexible stretcher (C-1)

- Portable ambulance stretcher
- Long spine board
- Basket stretcher

#### -Stair chair

# Affective Objectives

1-6.13 Explain the rationale for properly lifting and moving patients. (A-3)

#### **Psychomotor Objectives**

- 1-6.14 Working with a partner, prepare each of the following devices for use, transfer a patient to the device, properly position the patient on the device, move the device to the ambulance and load the patient into the ambulance:
  - Wheeled ambulance stretcher
- Scoop stretcher
- Portable ambulance stretcher
- Long spine board

- Stair chair

- Basket stretcher
- Flexible stretcher (P-1,2)
- 1-6.15 Working with a partner, the EMT-I will demonstrate techniques for the transfer of a patient from an ambulance stretcher to a hospital stretcher. (P-1,2)

# **Airway**

2-1 22

Recommended minimum time to complete: Four Hours (1.5 hours lecture/review, 2.5 hours dedicated skills practice)

#### Cognitive Objectives

At the completion of this lesson, the EMT-I student will be able to:

2-1.1 R Name and label the major structures of the respiratory system on a diagram. (C-1) 2-1.2 R List the signs of adequate breathing. (C-1) 2-1.3 R List the signs of inadequate breathing. (C-1) Describe the steps in performing the head-tilt chin-lift. (C-1) 2-1.4 2-1.5 Relate mechanism of injury to opening the airway. (C-3) 2-1.6 Describe the steps in performing the jaw thrust. (C-1) State the importance of having a suction unit ready for immediate use when providing 2-17 emergency care. (C-1) 2-1.8 R Describe the techniques of suctioning. (C-1) 2-19 Describe how to artificially ventilate a patient with a pocket mask. (C-1) Describe the steps in performing the skill of artificially ventilating a patient with a bag-2-1.10 valve-mask while using the jaw thrust. (C-1) 2-1.11 List the parts of a bag-valve-mask system. (C-1) 2-1.12 Describe the steps in performing the skill of artificially ventilating a patient with a bagvalve-mask for one and two rescuers. (C-1) 2-1.13 R Describe the signs of adequate artificial ventilation using the bag-valve-mask. (C-1) 2-1.14 R Describe the signs of inadequate artificial ventilation using mechanical ventilations devices, such as a bag-valve-mask. (C-1) 2-1.15 Describe the steps in artificially ventilating a patient with a flow restricted, oxygenpowered ventilation device. (C-1) 2-1.16 List the steps in ventilating patients using barrier devices and mouth-to-mouth and mouth-to-stoma artificial ventilation techniques. (C-1) 2-1.17 Describe how to measure and insert an oropharyngeal (oral) airway. (C-1) 2-1.18 Describe how to measure and insert a nasopharyngeal (nasal) airway. (C-1) 2-1.19 Define the components of an oxygen delivery system. (C-1) Identify a nonrebreather face mask and state the oxygen flow requirements needed for its 2-1.20 use. (C-1) 2-1.21 Describe the indications for using a nasal cannula versus a nonrebreather face mask. (C-

Identify a nasal cannula and state the flow requirements needed for its use. (C-1)

#### Affective Objectives

- 2-1.23 R Explain the rationale for basic life support artificial ventilation and airway protective skills taking priority over most other basic life support skills. (A-3)
- 2-1.24 Explain the rationale for providing adequate oxygenation through high inspired oxygen concentrations to patients who, in the past, may have received low concentrations. (A-3)

- 2-1.25 R Demonstrate the steps in performing the head-tilt chin-lift. (P-1,2)
- 2-1.26 R Demonstrate the steps in performing the jaw thrust. (P-1,2)
- 2-1.27 R Demonstrate the techniques of suctioning. (P-1,2)
- 2-1.28 Demonstrate the steps in providing mouth-to-mouth artificial ventilation with body substance isolation (barrier shields). (P-1,2)
- 2-1.29 Demonstrate how to use a pocket mask to artificially ventilate a patient. (P-1,2)
- 2-1.30 Demonstrate the assembly of a bag-valve-mask unit. (P-1.2)
- 2-1.31 Demonstrate the steps in performing the skill of artificially ventilating a patient with a bag-valve-mask for one and two rescuers. (P-1,2)
- 2-1.32 Demonstrate the steps in performing the skill of artificially ventilating a patient with a bag-valve-mask while using the jaw thrust. (P-1,2)
- 2-1.33 Demonstrate artificial ventilation of a patient with a flow restricted, oxygen-powered ventilation device. (P-1,2)
- 2-1.34 Demonstrate how to artificially ventilate a patient with a stoma. (P-1,2)
- 2-1.35 Demonstrate how to insert an oropharyngeal (oral) airway. (P-1,2)
- 2-1.36 Demonstrate how to insert a nasopharyngeal (nasal) airway. (P-1,2)
- 2-1.37 Demonstrate the correct operation of oxygen tanks and regulators. (P-1,2)
- 2-1.38 Demonstrate the use of a nonrebreather face mask and state the oxygen flow requirements needed for its use. (P-1,2)
- 2-1.39 Demonstrate the use of a nasal cannula and state the flow requirements needed for its use. (P-1,2)
- 2-1.40 Demonstrate how to artificially ventilate the infant and child patient. (P-1,2)
- 2-1.41 Demonstrate oxygen administration for the infant and child patient. (P-1,2)
- 2-1.45 Describe the problems in free flow oxygen delivery given long transport times and limited O<sub>2</sub> supplies, and how EMTs can lengthen the time of oxygen delivery by decreasing the flow rate. (P-2)

#### **CPR Objectives**

Practice time with EMT-1 skills in cardiac arrest should be incorporated into the course design. It fits best later in the program after all skills have been introduced.

Although CPR is considered a prerequisite to the EMT training program, students are required to have mastery of the information and skills. Consequently, the EMT-Instructor should advise students that they are responsible for meeting the following objectives:

- 2-1.42 R List the major factors of heart disease and discuss prudent heart living. (C-1)
- 2-1.43 R List the signs and symptoms of a heart attack.
- 2-1.44 Demonstrate the following skills on a manikin:

Recovery position
Rescue breathing (adult, child, and infant)
Foreign body airway obstruction management (adult, child, and infant)
One rescuer CPR (adult, child, and infant)
Two rescuer CPR (adult and child)
Mouth to mask ventilation

# Scene Size-Up

Recommended minimum time to complete: 30 minutes

### Cognitive Objectives

At the completion of this lesson, the EMT-I student will be able to:

- 3-1.1 Recognize hazards/potential hazards. (C-1)
- 3-1.2 Describe common hazards found at the scene of a trauma and a medical patient. (C-1)
- 3-1.3 R Determine if the scene is safe to enter. (C-2)
- 3-1.4 R Discuss common mechanisms of injury/nature of illness. (C-1)
- 3-1.5 Discuss the reason for identifying the total number of patients at the scene. (C-1)
- 3-1.6 Explain the reason for identifying the need for additional help or assistance. (C-1)

#### Affective Objectives

- 3-1.7 Explain the rationale for crew members to evaluate scene safety prior to entering. (A-2)
- 3-1.8 Serve as a model for others explaining how patient situations affect your evaluation of mechanism of injury or illness. (A-2)

### **Psychomotor Objectives**

3-1.9 Observe various scenarios and identify potential hazards. (P-1

#### **Initial Assessment**

Recommended minimum time to complete: 30 minutes

Most bridge class students will have developed a good sense of patient assessment. Be sure to emphasize that although they learned most of this material in ETT, they are now expected to perform at a consistently higher level. A brief lecture/review/video of each patient assessment component should be presented and then students moved directly to skills practice. Emphasize that the patient assessment lessons, while individual here, only exist as part of a whole "patient assessment system". Once students are proficient, do not drill assessments as individual components. Integrate patient assessment skills into scenario practice for the advanced students.

#### Cognitive Objectives

At the completion of this lesson, the EMT-I student will be able to:

3-2.1	Summarize the reasons for forming a general impression of the patient. (C-1)
3-2.2 R	Discuss methods of assessing altered mental status. (C-1)
3-2.3	Differentiate between assessing the altered mental status in the adult, child and infant patient. (C-3)
3-2.4 R	Discuss methods of assessing the airway in the adult, child and infant patient. (C-1)
3-2.5	State reasons for management of the cervical spine once the patient has been determined to be a trauma patient. (C-1)
3-2.6 R	Describe methods used for assessing if a patient is breathing. (C-1)
3-2.7	State what care should be provided to the adult, child and infant patient with adequate breathing. (C-1)
3-2.8	State what care should be provided to the adult, child and infant patient without adequate breathing. (C-1)
3-2.9 R	Differentiate between a patient with adequate and inadequate breathing. (C-3)
3-2.10	Distinguish between methods of assessing breathing in the adult, child and infant patient (C-3)
3-2.11	Compare the methods of providing airway care to the adult, child and infant patient. (C-3)
3-2.12 R	Describe the methods used to obtain a pulse. (C-1)
3-2.13	Differentiate between obtaining a pulse in an adult, child and infant patient. (C-3)
3-2.14 R	Discuss the need for assessing the patient for external bleeding. (C-1)
3-2.15	Describe normal and abnormal findings when assessing skin color. (C-1)
3-2.16	Describe normal and abnormal findings when assessing skin temperature. (C-1)
3-2.17	Describe normal and abnormal findings when assessing skin condition. (C-1)
3-2.18	Describe normal and abnormal findings when assessing skin capillary refill in the infant and child patient. (C-1)
3-2.19	Explain the reason for prioritizing a patient for care and transport. (C-1)

#### Affective Objectives

- 3-2.20 Explain the importance of forming a general impression of the patient. (A-1)
- 3-2.21 Explain the value of performing an initial assessment. (A-2)

#### **Psychomotor Objectives**

3-2.22 Demonstrate the techniques for assessing mental status. (P-1,2) Demonstrate the techniques for assessing the airway. (P-1,2) 3-2.23 3-2.24 Demonstrate the techniques for assessing if the patient is breathing. (P-1,2) 3-2.25 Demonstrate the techniques for assessing if the patient has a pulse. (P-1,2) Demonstrate the techniques for assessing the patient for external bleeding. (P-1,2) 3-2.26 3-2.27 Demonstrate the techniques for assessing the patient's skin color, temperature, condition and capillary refill (infants and children only). (P-1,2) 3-2.28 Demonstrate the ability to prioritize patients. (P-1,2) Given a description of hypothetical patients, and assessment findings, identify those who 3-2.29 need immediate transport to a medical facility, and explain your rationale for your decisions. (C-2)

# **History and Physical Exam - Trauma Patients**

Recommended minimum time to complete: Two hours (one hour presentation, one hour dedicated skills practice)

Many students and instructors have difficulty differentiating when a rapid or focused exam should be performed. Mechanism of injury is the main determinant. If the mechanism was severe, a rapid exam should be performed. If the mechanism was not severe and the patient can reliably tell the rescuer about signs and symptoms, a focused exam should be performed. The key point is not to miss anything.

#### Cognitive Objectives

At the completion of this lesson, the EMT-I student will be able to:

- 3-3.1 Discuss the reasons for reconsideration concerning the mechanism of injury. (C-1)
- 3-3.2 State the reasons for performing a rapid trauma assessment. (C-1)
- 3-3.3 Recite examples and explain why patients should receive a rapid trauma assessment. (C-1)
- Describe the areas included in the rapid trauma assessment and discuss what should be evaluated. (C-1)
- 3-3.5 Differentiate when the rapid assessment may be altered in order to provide patient care. (C-3)
- 3-3.6 Discuss the reason for performing a focused history and physical exam. (C-1)

#### Affective Objectives

3-3.7 Recognize and respect the feelings that patients might experience during assessment. (A-1)

- 3-3.8 Demonstrate the rapid trauma assessment that should be used to assess a patient based on mechanism of injury. (P-1,2)
- 3-3.9 Demonstrate a focused history and physical examination. (P-1,2)

# **History and Physical Exam - Medical Patients**

Recommended minimum time to complete: 1.5 hours (45 minutes lecture, 45 minutes dedicated skills practice

Like with the trauma history and physical exam, there are two subparts to the history and physical exam for the medical patient. A rapid exam of all body systems should be performed if the patient cannot reliably indicate signs and symptoms of illness. A focused exam should be applied when the patient is reliably able to tell the rescuer about signs and symptoms.

#### Cognitive Objectives

At the completion of this lesson, the EMT-I student will be able to:

- 3-4.1 Describe the unique needs for assessing an individual with a specific chief complaint with no known prior history. (C-1)
- 3-4.2 Differentiate between the history and physical exam that is performed for responsive patients with no known prior history and patients responsive with a known prior history. (C-3)
- 3-4.3 Describe the unique needs for assessing an individual who is unresponsive or has an altered mental status. (C-1)
- 3-4.4 Differentiate between the assessment that is performed for a patient who is unresponsive or has an altered mental status and other medical patients requiring assessment. (C-3)

# Affective Objectives

3-4.5 Attend to the feelings that these patients might be experiencing. (A-1)

- 3-4.6 Demonstrate the patient care skills that should be used to assist with a patient who is responsive with no known history. (P-1,2)
- 3-4.7 Demonstrate the patient care skills that should be used to assist with a patient who is unresponsive or has an altered metal status. (P-1,2)

# **Detailed Physical Exam**

Recommended minimum time to complete: one hour

The intent of the detailed exam is to add more precision to what is known already from the initial exam and history and physical. Areas that were rapidly examined earlier should be reexamined to determine additional findings and increase accuracy. Detailed physical examination is not usually indicated in a medical patient as there is no reason to suspect injuries that the detailed physical examination would reveal. However, maintain a high index of suspicion and remain ready to perform a detailed examination if anything in patient's condition changes causing you to suspect an injury.

#### Cognitive Objectives

*At the completion of this lesson, the EMT-I student will be able to:* 

- 3-5.1 Discuss the components of the detailed physical exam. (C-1)
- 3-5.2 State the areas of the body that are evaluated during the detailed physical exam.(C-1)
- Explain what additional care should be provided while performing the detailed physical exam. (C-1)
- 3-5.4 Distinguish between the detailed physical exam that is performed on a trauma patient and that of the medical patient. (C-3)
- 3-5.5 Define, describe and discuss the clinical significance of "referred pain." (C-2)
- 3-5.6 Define, describe and discuss the clinical significance of "diaphoresis." (C-2)

#### **Affective Objectives**

3-5.7 Explain the rationale for the feelings that these patients might be experiencing. (A-3)

#### **Psychomotor Objectives**

3-5.8 Demonstrate the skills involved in performing the detailed physical exam. (P-1,2)

# **On-Going Assessment**

Recommended minimum time to complete: 0.5 hour skill practice *All patients require ongoing examination. The frequency and level of detail will change according to the severity of illness/injury.* 

#### Cognitive Objectives

At the completion of this lesson, the EMT-I student will be able to:

- 3-6.1 Discuss the reasons for repeating the initial assessment as part of the on-going assessment. (C-1)
- 3-6.2 Describe the components of the on-going assessment. (C-1)
- 3-6.3 Describe trending of assessment components. (C-1)

#### Affective Objectives

- 3-6.4 Explain the value of performing an on-going assessment. (A-2)
- 3-6.5 Recognize and respect the feelings that patients might experience during assessment. (A-1)
- 3-6.6 Explain the value of trending assessment components to other health professionals who assume care of the patient. (A-2)

#### **Psychomotor Objectives**

3-6.7 Demonstrate the skills involved in performing the on-going assessment. (P-1,2)

#### **Communications**

Recommended minimum time to complete: One hour (20 minute lecture and 40 minute skills practice) Simulated radio reports (from scenario patients) should be given from this point on in class.

#### Cognitive Objectives

At the completion of this lesson, the EMT-I student will be able to:

- 3-7.1 List the proper methods of initiating and terminating a radio call. (C-1)
- 3-7.2 State the proper sequence for delivery of patient information via a telecommunications device such a radio. (C-1)
- 3-7.3 Explain the importance of effective communication of patient information in verbal reports. (C-1)
- 3-7.4 Identify the essential components of the verbal report. (C-1)
- 3-7.5 Describe the attributes for increasing effectiveness and efficiency of verbal communications. (C-1)
- 3-7.6 State legal aspects to consider in verbal communication. (C-1)
- 3-7.7 Discuss the communication skills that should be used to interact with the patient. (C-1)
- 3-7.8 Discuss the communication skills that should be used to interact with the family, bystanders, and individuals from other agencies while providing patient care and the difference between skills used to interact with the patient and those used to interact with others. (C-1)
- 3-7.9 List the common content and sequence for providing verbal patient reports in the following phases of a typical call:(C-1)
  - To the scene. At the facility.
  - At the scene. To the station.
  - To the facility. At the station.
  - At the patient's side

# Affective Objectives

3-7.10 Explain the rationale for providing efficient and effective radio communications and patient reports. (A-3)

- 3-7.11 Perform a simulated, organized, concise radio transmission. (P-2)
- 3-7.12 Perform an organized, concise patient report that would be given to the staff at a receiving facility. (P-2)
- 3-7.13 Perform a brief, organized report that would be given to an ALS provider arriving at an incident scene at which the EMT-I was already providing care. (P-2)

#### **Documentation**

Recommended minimum time to complete: One hour (20 minutes lecture, 40 minutes practical) Report writing practice should be incorporated into all lessons from this point on.

#### Cognitive Objectives

At the completion of this lesson, the EMT-I student will be able to:

- 3-8.1 Explain the components of the written report and list the information that should be included on the written report. (C- I)
- 3-8.2 Identify the various sections of the written report. (C-1)
- 3-8.3 Describe what information is required in each section of the prehospital care report and how it should be entered. (C-1)
- 3-8.4 Define the special considerations concerning patient refusal. (C-1)
- 3-8.5 Describe the legal implications associated with the written report. (C-1)
- 3-8.6 Discuss all state and/or local record and reporting requirements. (C-1)

#### Affective Objectives

At the completion of this lesson, the EMT-I student will be able to:

- 3-8.7 Explain the rationale for patient care documentation. (A-3)
- 3-8.8 Explain the rationale for the EMS system gathering data. (A-3)
- 3-8.9 Explain the rationale for using medical terminology correctly. (A-3)
- 3-8.10 Explain the rationale for using an accurate and synchronous clock so that information can be used in trending. (A-3)

#### **Psychomotor Objectives**

At the completion of this lesson, the EMT-I student will be able to:

3-8.11 Complete a prehospital care report. (P-2)

# **General Pharmacology**

Recommended minimum time to complete: 1 hour, practiced from this point on in scenarios/skill practice

#### Cognitive Objectives

At the completion of this lesson, the EMT-I student will be able to:

- 4-1.1 Identify which medications will be carried on the unit. (C-1)
- 4-1.2 State the medications carried on the unit by the generic name. (C-1)
- 4-1.3 Identify the medications with which the EMT-I may assist the patient with administering. (C-1)
- 4-1.4 State the medications the EMT-I can assist the patient with by the generic name. (C-1)
- 4-1.5 Discuss the forms in which the medications may be found. (C-1)
- 4-1.9 State the conditions under which nitroglycerin, epinephrine autoinjectors, and bronchodilator inhalers must be stored to maintain effectiveness. (C-1)
- 4-1.10 Define anaphylaxis. (C-1)

#### Affective Objectives

4-1.6 Explain the rationale for the administration of medications. (A-3)

- 4-1.7 Demonstrate general steps for assisting patient with self administration of medications. (P-2)
- 4-1.8 Read the labels and inspect each type of medication. (P-2)

# **Respiratory Emergencies**

Recommended minimum time to complete: One hour lecture, one hour dedicated skills practice

#### Cognitive Objectives

At the completion of this lesson, the EMT-I student will be able to:

- 4-2.1 List the structure and function of the respiratory system. (C-1)
- 4-2.2 State the signs and symptoms of a patient with breathing difficulty. (C-1)
- 4-2.3 Describe the emergency medical care of the patient with breathing difficulty. (C-1)
- 4-2.4 Recognize the need for medical direction to assist in the emergency medical care of the patient with breathing difficulty. (C-3)
- 4-2.5 Describe the emergency medical care of the patient with breathing distress. (C-1)
- 4-2.6 Establish the relationship between airway management and the patient with breathing difficulty. (C-3)
- 4-2.7 List signs of adequate air exchange. (C-1)
- 4-2.8 State the generic name, medication forms, dose, administration, action, indications and contraindications for the prescribed inhaler. (C-1)
- 4-2.9 Distinguish between the emergency medical care of the infant, child and adult patient with breathing difficulty. (C-3)
- 4-2.10 Differentiate between upper airway obstruction and lower airway disease. (C-3)

#### Affective Objectives

- 4-2.11 Defend EMT-I treatment regimens for various respiratory emergencies. (A-1)
- 4-2.12 Explain the rationale for administering an inhaler. (A-3)

- 4-2.13 Demonstrate the emergency medical care for breathing difficulty. (P-1,2)
- 4-2.14 Perform the steps in facilitating the use of an inhaler. (P-2)

# **Cardiovascular Emergencies**

Recommended minimum time to complete: Four hours (1.5 hours lecture, 2.5 hours practice) if students have not had previous AED training. Two hours (45 minutes review, 1.25 hours practice) if students have AED training.

#### Cognitive Objectives

At the completion of this lesson, the EMT-I student will be able to:

Describe the structure and function of the cardiovascular system. (C-1) 4-3.1R Describe the emergency medical care of the patient experiencing chest pain/discomfort. 4-3.2 (C-1)4-3.3 List the indications for automated external defibrillation (AED). (C-1) 4-3.4 List the contraindications for automated external defibrillation. (C-1) 4-3.5 Define the role of EMT-I in the emergency cardiac care system. (C-1) 4-3.6 Explain the impact of age and weight on defibrillation. (C-1) 4-3 7 Discuss the position of comfort for patients with various cardiac emergencies. (C-1) 4-3.8 Establish the relationship between airway management and the patient with cardiovascular compromise. (C-3) 4-3.9 Predict the relationship between the patient experiencing cardiovascular compromise and basic life support. (C-2) 4-3.10 Discuss the fundamentals of early defibrillation. (C-1) Explain the rationale for early defibrillation. (C-1) 4-3.11 Explain that not all chest pain patients result in cardiac arrest and do not need to be 4-3.12 attached to an automated external defibrillator. (C-1) Explain the importance of prehospital ACLS intervention if it is available. (C-1) 4-3.13 4-3.14 Explain the importance of urgent transport to a facility with Advanced Cardiac Life Support if it is not available in the prehospital setting. (C-1) 4-3.15 Discuss the various types of automated external defibrillators. (C-1) 4-3.16 Differentiate between the fully automated and the semiautomatic defibrillator. (C-3) 4-3.17 Discuss the procedures that must be taken into consideration for standard operations of the various types of automated external defibrillators. (C-1) State the reasons for assuring that the patient is pulseless and apneic when using the 4-3.18 automated external defibrillator. (C-1) 4-3.19 Discuss the circumstances which may result in inappropriate shocks. (C-1) Explain the considerations for interruption of CPR, when using the automated external 4-3.20 defibrillator. (C-1) 4-3.21 Discuss the advantages and disadvantages of automated external defibrillators. (C-1) 4-3.22 Describe the advantages of automated external defibrillation with respect to speed of delivery of the first series of shocks. (C-1) 4-3.23 Discuss the use of remote defibrillation through adhesive pads. (C-1)

4-3.24	Discuss the special considerations for rhythm monitoring. (C-1)
4-3.25	List the steps in the operation of the automated external defibrillator. (C-1)
4-3.26	Discuss the standard of care that should be used to provide care to a patient with persistent ventricular fibrillation and no available ACLS. (C-1)
4-3.27	Discuss the standard of care that should be used to provide care to a patient with recurrent ventricular fibrillation and no available ACLS, (C-1)
4-3.28	Differentiate between the single rescuer and multi-rescuer care with an automated external defibrillator. (C-3)
4-3.29	Explain the reason for pulses not being checked between shocks with an automated external defibrillator. (C-1)
4-3.30	Discuss the importance of coordinating ACLS trained providers with personnel using automated external defibrillators. (C-1)
4-3.31	Discuss the importance of post-resuscitation care. (C-1)
4-3.32	List the components of post-resuscitation care. (C-1)
4-3.33	Explain the importance of frequent practice with the automated external defibrillator. (C-1)
4-3.34	Discuss the need to complete the Automated Defibrillator: Operator's Shift Checklist. (C-1)
4-3.35	Explain the role medical direction plays in the use of automated external defibrillation. (C-1)
4-3.36	State the reasons why a case review should be completed following the use of the automated external defibrillator. (C-1)
4-3.37	Discuss the components that should be included in a case review. (C-1)
4-3.38	Discuss the goal of quality improvement in automated external defibrillation. (C-1)
4-3.39	Recognize the need for medical direction of protocols to assist in the emergency medical care of the patient with chest pain. (C-3)
4-3.40	List the indications for the use of nitroglycerin. (C-1)
4-3.41	State the contraindications and side effects for the use of nitroglycerin. (C-1)
4-3.42	Define the function of all controls on an automated external defibrillator, and describe event documentation and battery defibrillator maintenance. (C-1)
4-3.43	List the requirements for becoming properly trained and authorized to use an automated external defibrillator.
4-3.44	Describe the proper care of a patient in cardiac arrest who has been defibrillated by on-scene personnel prior to the EMT's arrival.
4-3.45	Define and list the signs and symptoms of congestive heart failure. (C-1)
4-3.46	Compare and contrast the emergency cardiac care, including CPR, provided to patients with and without automatic implantable cardiac defibrillators. (C-1)
4-3.47	Define "cerebrovascular accident" and describe its signs, symptoms and treatment (C-1)

# Affective Objectives

- 4-3.48 Defend the reasons for obtaining initial training in automated external defibrillation and the importance of continuing education. (A-3)
- 4-3.49 Defend the reason for maintenance of automated external defibrillators. (A-3)
- 4-3.50 Explain the rationale for administering nitroglycerin to a patient with chest pain or discomfort. (A-3)

- 4-3.51 Demonstrate the assessment and emergency medical care of a patient experiencing chest pain/discomfort. (P-1,2)
- 4-3.52 Demonstrate the application and operation of the automated external defibrillator. (P-1,2)
- 4-3.53 Demonstrate the maintenance of an automated external defibrillator. (P-1,2)
- 4-3.54 Demonstrate the assessment and documentation of patient response to the automated external defibrillator. (P-1,2)
- 4-3.55 Demonstrate the skills necessary to complete the Automated Defibrillator: Operator's Shift Checklist. (P-1,2)
- 4-3.56 Perform the steps in facilitating the use of nitroglycerin for chest pain or discomfort. (P-2)
- 4-3.57 Demonstrate the assessment and documentation of patient response to nitroglycerin. (P-1,2)
- 4-3.58 Practice completing a prehospital care report for patients with cardiac emergencies. (P-2)

#### **Diabetes/Altered Mental Status**

Recommended minimum time to complete: 1.5 hours (one hour lecture, 0.5 hour dedicated skills practice)

### Cognitive Objectives

At the completion of this lesson, the EMT-I student will be able to:

- 4-4.1 Identify the patient taking diabetic medications with altered mental status and the implications of a diabetes history. (C-1)
- 4-4.2 State the steps in the emergency medical care of the patient taking diabetic medicine with an altered mental status and a history of diabetes. (C-1)
- 4-4.3R Establish the relationship between airway management and the patient with altered mental status. (C-3)
- 4-4.4 State the generic and trade names, medication forms, dose, administration, action, and contraindications for oral glucose. (C-1)
- 4-4.5*R* Describe the assessment and treatment of the adult patient having seizures. (C-1)

#### Affective Objectives

4-4.6 Explain the rationale for administering oral glucose. (A-3)

- 4-4.7 Demonstrate the steps in the emergency medical care for the patient taking diabetic medicine with an altered mental status and a history of diabetes. (P-1,2)
- 4-4.8 Demonstrate the steps in the administration of oral glucose. (P-1,2)
- 4-4.9 Demonstrate the assessment and documentation of patient response to oral glucose. (P-1,2)

# **Allergies**

Recommended minimum time to complete: two hours (one hour lecture, one hour dedicated skills practice)

#### Cognitive Objectives

At the completion of this lesson, the EMT-I student will be able to:

- 4-5.1 Recognize the patient experiencing an allergic reaction. (C-1)
- 4-5.2 Describe the emergency medical care of the patient with an allergic reaction. (C-1)
- 4-5.3 Establish the relationship between the patient with an allergic reaction and airway management. (C-3)
- 4-5.4 Describe the basic mechanisms of allergic response and the implications for airway management. (C-1)
- 4-5.5 State the generic and trade names, medication forms, dose, administration, action, and contraindications for the epinephrine auto-injector. (C-1)
- 4-5.6 Evaluate the need for medical direction in the emergency medical care of the patient with an allergic reaction. (C-3)
- 4-5.7 Differentiate between the general category of those patients having an allergic reaction and those patients having an allergic reaction and requiring immediate medical care, including immediate use of epinephrine auto-injector. (C-3)
- 4-5.8 List three of the most common allergens found in the community in which the EMT will be providing care. (C-1)

#### Affective Objectives

4-5.9 Explain the rationale for administering epinephrine using an auto-injector. (A-3)

- 4-5.10 Demonstrate the emergency medical care of the patient experiencing an allergic reaction. (P-1,2)
- 4-5.11 Demonstrate the use of epinephrine auto-injector. (P-1.2)
- 4-5.12 Demonstrate the assessment and documentation of patient response to an epinephrine injection. (P-1,2)
- 4-5.13 Demonstrate proper disposal of equipment. (P-1,2)

# Poisoning/Overdose

Recommended minimum time to complete: Two hours (one hour lecture, one hour skills practice)

#### Cognitive Objectives

At the completion of this lesson, the EMT-I student will be able to:

- 4-6.1 List various ways that poisons enter the body. (C-1)
- 4-6.2 List signs/symptoms associated with poisoning. (C-1)
- 4-6.3 Discuss the emergency medical care for the patient with possible overdose. (C-1)
- 4-6.4 Describe the steps in the emergency medical care for the patient with suspected poisoning. (C-1)
- 4-6.5 Establish the relationship between the patient suffering from poisoning or overdose and airway management. (C-3)
- 4-6.6 State the generic and trade names, indications, contraindications, medication form, dose, administration, actions, side effects and re-assessment strategies for activated charcoal. (C-1)
- 4-6.7 Recognize the need for medical direction in caring for the patient with poisoning or overdose. (C-3)
- 4-6.8 Categorize alcohol as a drug and describe its effects on the body in small, moderate, and large amounts. (C-1)
- 4-6.9 Describe the indications, contraindications, dosage, and side effects of syrup of ipecac, as well as the sequence of administration when also using activated charcoal. (C-1)
- 4-6-10 List three common drugs of abuse within the community in which the course is being taught (C-1)

#### Affective Objectives

- 4-6.11 Explain the rationale for administering activated charcoal. (A-3)
- Explain the rationale for contacting medical direction early in the prehospital management of the poisoning or overdose patient. (A-3)

- 4-6.13 Demonstrate the steps in the emergency medical care for the patient with possible overdose. (P-1,2)
- 4-6.14 Demonstrate the steps in the emergency medical care for the patient with suspected poisoning. (P-1,2)
- 4-6.15 Perform the necessary steps required to provide a patient with activated charcoal. (P-2)
- 4-6.16 Demonstrate the assessment and documentation of patient response. (P-1,2)

## **Environmental Emergencies**

Recommended minimum time to complete: 2 hours (1 hour review, one hour skill practice)

#### Cognitive Objectives

At the completion of this lesson, the EMT-I student will be able to:

- 4-7.1 R Describe the various ways that the body loses heat. (C-1)
- 4-7.2 R Describe the assessment and management of moderate and severe hypothermia as outlined in the **Alaska Cold Injuries Guidelines**. (C-1)
- 4-7.3 *R* Describe the assessment and management of the cold water near drowning as outlined in the *Alaska Cold Injuries Guidelines*. (C-1)
- 4-7.4 R Describe the assessment and management of frostbite as outlined in the **Alaska Cold Injuries Guidelines**. (C-1)
- 4-7.5 R Explain the steps in providing emergency care to a patient exposed to heat. (C-1)
- 4-7.6 R Recognize the signs and symptoms of water-related emergencies. (C-1)
- 4-7.7 R Describe the complications of near drowning. (C-1)
- 4-7.8 Discuss the emergency medical care of bites and stings. (C-1)

#### Affective Objectives

No affective objectives identified

- 4-7.9 R Demonstrate the assessment and emergency medical care of a patient with exposure to cold. (P-1,2)
- 4-7.10 R Demonstrate the assessment and emergency medical care of a patient with exposure to heat. (P-1,2)
- 4-7.11 R Demonstrate the assessment and emergency medical care of a near drowning patient. (P-1,2)

## **Behavioral Emergencies**

Recommended minimum time to complete: 1.5 hours (one hour lecture, 30 minutes scenario) *Note: All learning objectives in this section are Alaska specific and are supported by Alaska developed teaching materials.* 

#### Cognitive Objectives

At the completion of this lesson, the EMT-1 student will be able to:

- 4-8.1 Define behavioral emergencies. (C-1)
- 4-8.2 Discuss four general factors that may cause an alteration in a patient's behavior. (C-1)
- 4-8.3 State types of behaviors that may indicate a psychiatric crisis. (C-1)
- 4-8.4 Discuss two elements to be included in an initial assessment of a patient in a behavioral emergency. (C-1)
- 4-8.5 Discuss two elements to be included in a focused history and physical assessment of a patient in a behavioral emergency. (C-1)
- 4-8.6 Discuss four characteristics which may indicate a patient is at risk for suicide. (C-1)
- 4-8.7 Discuss three special medical/legal considerations for managing a patient who is a danger to self/others but refuses treatment. (C-1)
- 4-8.8 Discuss three behavioral signs which indicate a patient is at risk for violence. (C-1)
- 4-8.9 Discuss four methods to calm behavioral emergency patients. (C-1)
- 4-8.10 Know where to find information on how behavioral problems are expressed across cultures in Alaska. (C-1)
- 4-8.11 Name three medications commonly used in the treatment of psychiatric disorder. (C-1)
- 4-8.12 Describe the emergency mental health services available in the student's community. (C-1)
- 4-8.13 Describe the importance of scene safety. (C-1)

## **Affective Objectives**

4-8.14 Explain two reasons for modifying your behavior toward the patient in a behavioral emergency (A-3)

- 4-8.10 Demonstrate the assessment and emergency medical care of the patient experiencing a behavioral emergency (P-1, 2)
  - 1) Adolescent Suicide
  - 2) Drug Delirium
  - 3) A.S.K. Questionnaire
- 4-8.11 Demonstrate at least one technique to safely restrain a patient with a behavioral problem (P-1,2)

## Obstetrics/Gynecology

Recommended minimum time to complete: Two hours (one hour lecture, one hour scenario) if OB was not taught in ETT class. If students have OB training, one hour of scenarios.

#### Cognitive Objectives

At the completion of this lesson, the EMT-I student will be able to:

4-9.1 Identify the following structures: uterus, vagina, fetus, placenta, umbilical cord, amniotic sac, perineum. (C-1) 4-9.2 Identify and explain the use of the contents of an obstetrics kit. (C-1) 4-9.3 Identify predelivery and gynecological emergencies. (C-1) 4-9.4 Define eclampsia and preeclampsia and list the signs, symptoms, and basic management. (C-1)4-9.5 State indications of an imminent delivery. (C-1) 4-9.6 Differentiate the emergency medical care provided to a patient with predelivery emergencies from a normal delivery. (C-3) 4-9.7 State the steps in the predelivery preparation of the mother. (C-1) 4-9.8 Establish the relationship between body substance isolation and childbirth. (C-3) 4-9.9 State the steps to assist in the delivery. (C-1) 4-9.10 Describe care of the baby as the head appears. (C-1) 4-9.11 Describe how and when to cut the umbilical cord. (C-1) 4-9.12 Discuss the steps in the delivery of the placenta. (C-1) 4-9.13 List the steps in the emergency medical care of the mother post-delivery. (C-3) 4-9.14 Summarize neonatal resuscitation procedures. (C-1) Describe the procedures for the following abnormal deliveries: breech birth, prolapsed 4-9.15 cord, limb presentation. (C-1) 4-9.16 Differentiate the special considerations for multiple births. (C-3) 4-9.17 Describe special considerations of meconium. (C-1) 4-9.18 Describe special considerations of a premature baby. (C-1)

#### Affective Objectives

4-9.19

4-9.20 Explain the rationale for understanding the implications of treating two patients (mother and baby). (A-3)

Discuss the emergency medical care of a patient with a gynecological emergency. (C-1)

- 4-9.21 Demonstrate the steps to assist in the normal cephalic delivery. (P-1,2)
- 4-9.22 Demonstrate necessary care procedures of the fetus as the head appears. (P-1,2)

4-9.23	Demonstrate infant neonatal procedures. (P-1,2)
4-9.24	Demonstrate post delivery care of infant. (P-1,2)
4-9.25	Demonstrate how and when to cut the umbilical cord. (P-1,2)
4-9.26	Attend to the steps in the delivery of the placenta. (P-1,2)
4-9.27	Demonstrate the post-delivery care of the mother. (P-1,2)
4-9.28	Demonstrate the emergency care for the following emergencies: vaginal bleeding, breech birth, prolapsed cord, limb presentation. (P-1,2)
4-9.29	Demonstrate the steps in the emergency medical care of the mother with excessive bleeding. (P-1,2)

## **Bleeding and Shock**

Recommended minimum time to complete: 2 hours (one hour lecture, one hour dedicated skill practice)

### Cognitive Objectives

At the completion of this lesson, the EMT-I student will be able to:

- 5-1.1R List the structure and function of the circulatory system. (C-1)
- 5-1.2 Differentiate between arterial, venous and capillary bleeding. (C-3)
- 5-1.3R State methods of emergency medical care of external bleeding. (C-1)
- 5-1.4 Establish the relationship between body substance isolation and bleeding. (C-3)
- 5-1.5 Establish the relationship between airway management and the trauma patient. (C-3)
- 5-1.6 Establish the relationship between mechanism of injury and internal bleeding. (C-3)
- 5-1.7R List the signs of internal bleeding. (C-1)
- 5-1.8R List the steps in the emergency medical care of the patient with signs and symptoms of internal bleeding. (C-1)
- 5-1.9 List signs and symptoms of shock (hypoperfusion). (C-1)
- 5-1.10 State the steps in the emergency medical care of the patient with signs and symptoms of shock (hypoperfusion). (C-1)
- 5.1.11 List any absolute and relative contraindication for the use of the PASG as outlined in the Alaska Trauma Guidelines. (C-1)

#### Affective Objectives

5-1.12 Explain the sense of urgency to transport patients that are bleeding and show signs of shock (hypoperfusion). (A-1)

- 5-1.13 Demonstrate direct pressure as a method of emergency medical care of external bleeding. (P-1,2)
- 5-1.14 Demonstrate the use of diffuse pressure as a method of emergency medical care of external bleeding. (P-1,2)
- 5-1.15 Demonstrate the use of pressure points and tourniquets as a method of emergency medical care of external bleeding. (P-1,2)
- 5-1.16 Demonstrate the care of the patient exhibiting signs and symptoms of internal bleeding. (P-1,2)
- 5-1.17 Demonstrate the care of the patient exhibiting signs and symptoms of shock (hypoperfusion). (P-1,2)
- 5-1.18 Demonstrate the use of the PASG for pelvic injuries. (P-2)
- 5-1.19 Demonstrate the use of the PASG for the patient in hypovolemic shock in accordance with Alaska PASG Guidelines. (P-2)
- 5-1.20 Demonstrate the proper application of the PASG on the patient with suspected spinal injuries. (P-2)

# **Soft Tissue Injuries**

Recommended minimum time to complete: 2 hours (one hour lecture, one hour dedicated skill practice)

## Cognitive Objectives

At the completion of this lesson, the EMT-I student will be able to:

5-2.1	State the major functions of the skin. (C-1)
5-2.2	List the layers of the skin. (C-1)
5-2.3	Establish the relationship between body substance isolation (BSI) and soft tissue injuries. (C-3)
5-2.4	List the types of closed soft tissue injuries. (C-1)
5-2.5	Describe the emergency medical care of the patient with a closed soft tissue injury. (C-1)
5-2.6 R	State the types of open soft tissue injuries. (C-1)
5-2.7 R	Describe the emergency medical care of the patient with an open soft tissue injury. (C-1)
5-2.8 R	Discuss the emergency medical care considerations for a patient with a penetrating chest injury. (C-1)
5-2.9	Describe the signs and symptoms of tension pneumothorax and its management. (C-1)
5-2.10	Describe the signs and symptoms of pericardial tamponade and its managment. (C-1)
5-2.11 R	State the emergency medical care considerations for a patient with an open wound to the abdomen. (C-1)
5-2.12	Describe the assessment and care of abdominal trauma in accordance with the <b>State of Alaska Trauma Guidelines</b> . (C-1)
5-2.13 R	Differentiate the care of an open wound to the chest from an open wound to the abdomen. (C-3)
5-2.14	List the classifications of burns. (C-1)
5-2.15	Define and describe the characteristics of a superficial burn. (C-1)
5-2.16	Define and describe the characteristics of a partial thickness burn. (C-1)
5-2.17	Define and describe the characteristics of a full thickness burn. (C-1)
5-2.18	Describe the emergency medical care of the patient with a superficial burn. (C-1)
5-2.19	Describe the emergency medical care of the patient with a partial thickness burn. (C-1)
5-2.20	Describe the emergency medical care of the patient with a full thickness burn. (C-1)
5-2.21	List the functions of dressing and bandaging. (C-1)
5-2.22	Describe the purpose of a bandage. (C-1)
5-2.23 R	Describe the steps in applying a pressure dressing. (C-1)
5-2.24	Establish the relationship between airway management and the patient with chest injury. burns, blunt and penetrating injuries. (C-1)
5-2.25	Describe the effects of improperly applied dressings, splints and tourniquets. (C-1)

- 5-2.26 R Describe the emergency medical care of a patient with an impaled object. (C-1)
- 5-2.27 R Describe the emergency medical care of a patient with an amputation.
- 5-2.28 Describe the emergency care for a chemical burn. (C-1)
- 5-2.29 Describe the emergency care for an electrical burn. (C-1)

#### Affective Objectives

No affective objectives identified.

- 5-2.30 R Demonstrate the steps in the emergency medical care of closed soft tissue injuries. (P-1,2)
- 5-2.31 R Demonstrate the steps in the emergency medical care of open soft tissue injuries. (P-1,2)
- 5-2.32 R Demonstrate the steps in the emergency medical care of a patient with an open chest wound. (P-1,2)
- 5-2.33 R Demonstrate the steps in the emergency medical care of a patient with open abdominal wounds. (P-1,2)
- 5-2.34 R Demonstrate the steps in the emergency medical care of a patient with an impaled object. (P-1,2)
- 5-2.35 R Demonstrate the steps in the emergency medical care of a patient with an amputation. (P-1,2)
- 5-2.36 R Demonstrate the steps in the emergency medical care of an amputated part. (P-1,2)
- 5-2.37 R Demonstrate the steps in the emergency medical care of a patient with superficial burns. (P-1,2)
- 5-2.38 R Demonstrate the steps in the emergency medical care of a patient with partial thickness burns. (P-1.2)
- 5-2.39 R Demonstrate the steps in the emergency medical care of a patient with full thickness burns. (P-1,2)
- 5-2.40 Demonstrate the steps in the emergency medical care of a patient with a chemical burn. (P-1,2)

#### **Musculoskeletal Care**

Recommended minimum time to complete: Two hours (30 minute lecture, 1.5 hours dedicated skills practice

#### Cognitive Objectives

At the completion of this lesson, the EMT-I student will be able to:

5-3.1 Describe the function of the muscular system. (C-1) 5-3.2 Describe the function of the skeletal system. (C-1) List the major bones or bone groupings of the spinal column; the thorax; the upper 5-3.3 R extremities; the lower extremities. (C-1) 5-3.4 Differentiate between an open and a closed painful, swollen, deformed extremity. (C-1) 5-3.5 R State the reasons for splinting. (C-1) 5-3.6 R List the general rules of splinting. (C-1) List the complications of splinting. (C-1) 5-3.7 R 5-3.8 R List the emergency medical care for a patient with a painful, swollen, deformed extremity. (C-1)

### Affective Objectives

5-3.9 R 5-3.10

- 5-3.11 Explain the rationale for splinting at the scene versus load and go. (A-3)
- 5-3.12 Explain the rationale for immobilization of the painful, swollen, deformed extremity. (A-3)

Describe the signs and symptoms of a flail chest and its management. (C-1)

#### Psychomotor Objectives

- 5-3.13 R Demonstrate the emergency medical care of a patient with a painful, swollen, deformed extremity. (P-1,2)
- 5-3.14 Demonstrate the application of a traction splint. (P-1)

Define fracture and dislocation. (C-1)

# Injuries to the Head and Spine

Recommended minimum time to complete: Three hours(one hour lecture, two hours dedicated skills practice)

## Cognitive Objectives

At the completion of this lesson, the EMT-I student will be able to:

5-4.1	State the components of the nervous system. (C-1)
5-4.2	List the functions of the central nervous system. (C-1)
5-4.3	Define the structure of the skeletal system as it relates to the nervous system. (C-1)
5-4.4	Relate mechanism of injury to potential injuries of the head and spine. (C-3)
5-4.5	Describe the implications of not properly caring for potential spine injuries. (C-1)
5-4.6	State the signs and symptoms of a potential spine injury. (C-1)
5-4.7	Describe the method of determining if a responsive patient may have a spine injury. (C-1)
5-4.8	Relate the airway emergency medical care techniques to the patient with a suspected spine injury. (C-3)
5-4.9	Describe how to stabilize the cervical spine. (C-1)
5-4.10 R	Discuss indications for sizing and using a cervical spine immobilization device. (C-1)
5-4.11 R	Establish the relationship between airway management and the patient with head and spine injuries. (C-1)
5-4.12	Describe a method for sizing a cervical spine immobilization device. (C-1)
5-4.13 R	Describe how to log roll a patient with a suspected spine injury. (C-1)
5-4.14 R	Describe how to secure a patient to a long spine board. (C-1)
5-4.15	List instances when a short spine board should be used. (C-1)
5-4.16	Describe how to immobilize a patient using a short spine board. (C-1)
5-4.17	Describe the indications for the use of rapid extrication. (C-1)
5-4.18	List steps in performing rapid extrication. (C-1)
5-4.19	State the circumstances when a helmet should be left on the patient. (C-1)
5-4.20	Discuss the circumstances when a helmet should be removed. (C-1)
5-4.21	Identify different types of helmets. (C-1)
5-4.22	Describe the unique characteristics of sports helmets. (C-1)
5-4.23	Explain the preferred methods to remove a helmet. (C-1)
5-4.24	Discuss alternative methods for removal of a helmet. (C-1)
5-4.25	Describe how the patient's head is stabilized to remove the helmet. (C-1)
5-4.26	Differentiate how the head is stabilized with a helmet compared to without a helmet. (C-3)
5-4.27	Describe the assessment and care of the head injured trauma patient in accordance with the <b>State of Alaska Trauma Guidelines</b> . (C-1)

5-4.28	State the rates for ventilating a patient with a head injury in accordance with the <b>State of Alaska Trauma Guidelines</b> . (C-1)
5-4.29	Describe the proper positioning of a head injured patient for transport. (C-1)
5-4.30	Compare and contrast the vital signs of a head injured patient with those of a patient in shock.
5-4.31	Describe how a patient found in a position other than supine, such as seated, may be safely straightened into a position allowing immobilization. (C-2)
5-4.32	Describe the techniques for the safe movement of a patient who is on a backboard. (C-2)
Affective (	Objectives
5-4.33	Explain the rationale for immobilization of the entire spine when a cervical spine injury is suspected. (A-3)
5-4.34	Explain the rationale for utilizing immobilization methods apart from the straps on the cots. (A-3)
5-4.35	Explain the rationale for utilizing a short spine immobilization device when moving a patient from the sitting to the supine position. (A-3)
5-4.36	Explain the rationale for utilizing rapid extrication approaches only when they indeed will make the difference between life and death. (A-3)
5-4.37	Defend the reasons for leaving a helmet in place for transport of a patient. (A-3)
5-4.38	Defend the reasons for removal of a helmet prior to transport of a patient. (A-3)
Psychomo	tor Objectives
5-4.39 R	Demonstrate opening the airway in a patient with suspected spinal cord injury. (P-1,2)
5-4.40	Demonstrate evaluating a responsive patient with a suspected spinal cord injury. (P-1,2)
5-4.41	Demonstrate stabilization of the cervical spine. (P- 1,2)
5-4.42	Demonstrate how to log roll a patient with a suspected spinal cord injury. (P-1,2)
5-4.43	Demonstrate securing a patient to a long spine board. (P-1,2)
5-4.44	Demonstrate using the short board immobilization technique. (P-1,2)

# 5-4.48

Demonstrate alternative methods for stabilization of a helmet. (P-1,2)

Demonstrate procedure for rapid extrication. (P-1,2)

Demonstrate helmet removal techniques. (P-1,2)

Demonstrate the techniques for the safe movement of a patient who is on a backboard. 5-4.49 (P-2)

Demonstrate preferred methods for stabilization of a helmet. (P- 1,2)

#### **Infants and Children**

5-4.45

5-4.46

5-4.47

Recommended minimum time to complete: Four hours (two hours lecture, two hours dedicated skill practice). Pediatric scenarios should be presented throughout the class.

#### Cognitive Objectives

At the completion of this lesson, the EMT-I student will be able to:

- 6-1.1 Identify the developmental considerations for the following age groups:(C-1)
  - infants toddlers pre-school- school age adolescent
- 6-1.2 Describe differences in anatomy and physiology of the infant, child and adult patient. (C-1)
- 6-1.3 Differentiate the response of the ill or injured infant or child (age specific) from that of an adult. (C-3)
- 6-1.4 Indicate various causes of respiratory emergencies. (C-1)
- 6-1.5 Differentiate between respiratory distress and respiratory failure. (C-3)
- 6-1.6 List the steps in the management of foreign body airway obstruction. (C-1)
- 6-1.7 Summarize emergency medical care strategies for respiratory distress and respiratory failure. (C-1)
- 6-1.8 Identify the signs and symptoms of shock (hypoperfusion) in the infant and child patient. (C-1)
- Describe the methods of determining end organ perfusion in the infant and child patient. (C-1)
- 6-1.10 State the usual cause of cardiac arrest in infants and children versus adults.(C-1)
- 6-1.11 List the common causes of seizures in the infant and child patient. (C-1)
- 6-1.12 Describe the management of seizures in the infant and child patient. (C-1)
- 6-1.13 Differentiate between the injury patterns in adults, infants, and children. (C-3)
- 6-1.14 Discuss the field management of the infant and child trauma patient. (C-1)
- 6-1.15 Summarize the indicators of possible child abuse and neglect. (C-1)
- 6-1.16 Describe the requirements and procedures for reporting suspicions of child abuse and neglect. (C-1)
- 6-1.17 Recognize need for EMT-I debriefing following a difficult infant or child transport. (C-1)

#### Affective Objectives

- 6-1.18 Explain the rationale for having knowledge and skills appropriate for dealing with the infant and child patient. (A-3)
- 6-1.19 Attend to the feelings of the family when dealing with an ill or injured infant or child. (A-1)
- 6-1.20 Understand the provider's own response (emotional) to caring for infants or children. (A-1)

Demonstrate the techniques of foreign body airway obstruction removal in the infant. (P-1,2)

Demonstrate the techniques of foreign body airway obstruction removal in the child. (P-1,2)

Demonstrate the assessment of the infant and child. (P-1,2)

Demonstrate bag-valve-mask artificial ventilations for the infant. (P-1,2)

Demonstrate bag-valve-mask artificial ventilations for the child. (P-1,2)

Demonstrate oxygen delivery for the infant and child. (P-1,2)

# **Ambulance Operations**

Recommended minimum time to complete: One hour

This module is optional for ETT training. If the class has been presented this material previously, use this time to present drills or scenarios related to operations. This would fit nicely into a "field day." If it is necessary to cover the Alaska Blue Light laws, they should be taught in a separate continuing education module or the course should be lengthened to accommodate the additional information.

#### Cognitive Objectives

At the completion of this lesson, the EMT-I student will be able to:

- 7-1.1 Discuss the medical and non-medical equipment needed to respond to a call. (C-1)
- 7-1.2 List the phases of an ambulance call. (C-1)
- 7-1.3 Describe the general provisions of state laws relating to the operation of the ambulance and privileges in any or all of the following categories:(C-1)
  - Speed
     Warning lights
     Sirens
     Right-of-way
     Parking
     Turning
- 7-1.4 List contributing factors to unsafe driving conditions. (C-1)
- 7-1.5 Describe the considerations that should by given to:
  - Request for escorts.
  - Following an escort vehicle.
  - Intersections. (C-1)
- 7-1.6 Discuss "Due Regard For Safety of All Others" while operating an emergency vehicle. (C-1)
- 7-1.7 State what information is essential in order to respond to a call. (C-1)
- 7-1.8 Discuss various situations that may affect response to a call. (C-1)
- 7-1.9 Differentiate between the various methods of moving a patient to the unit based upon injury or illness. (C-3)
- 7-1.10 Summarize the importance of preparing the unit for the next response. (C-1)
- 7-1.11 Identify what is essential for completion of a call. (C-1)
- 7-1.12 Distinguish among the terms cleaning, disinfection, high-level disinfection, and sterilization. (C-3)
- 7-1.13 Describe how to clean or disinfect items following patient care. (C-1)

#### Affective Objectives

7-1.14 Explain the rationale for having the unit prepared to respond. (A-3)

#### **Psychomotor Objectives**

No psychomotor objectives identified.

## **Gaining Access**

Recommended minimum time to complete: one hour

This session should be adapted to the environment the class will be working in as EMTs. this will of course increase the time needed. Specialized extrication tools and techniques may be presented. A live drill on extrication is strongly recommended. if this is not possible, a video will increase realism. The place to learn extrication is not in the classroom.

#### Cognitive Objectives

At the completion of this lesson, the EMT-I student will be able to:

- 7-2.1 Describe the purpose of extrication. (C-1)
- 7-2.2 Discuss the role of the EMT-I in extrication. (C-1)
- 7-2.3 Identify what equipment for personal safety is required for the EMT-I. (C-1)
- 7-2.4 Define the fundamental components of extrication. (C-1)
- 7-2.5 State the steps that should be taken to protect the patient during extrication. (C-1)
- 7-2.6 Evaluate various methods of gaining access to the patient. (C-3)
- 7-2.7 Distinguish between simple and complex access. (C-3)

#### Affective Objectives

No affective objectives identified.

#### **Psychomotor Objectives**

No psychomotor objectives identified.

#### **Overviews**

Recommended minimum time to complete: two hours

This is another topic where a drill is likely the most effective teaching method. A mass casualty drill requires application of all skills and knowledge learned. and would make for an enjoyable session.

#### Cognitive Objectives

At the completion of this lesson, the EMT-I student will be able to:

- 7-3.1 Explain the EMT-I's role during a call involving hazardous materials. (C-1)
- 7-3.2 Describe what the EMT-I should do if there is reason to believe that there is a hazard at the scene. (C-1)
- 7-3.3 Describe the actions that an EMT-I should take to ensure bystander safety. (C-1)
- 7-3.4 State the role the EMT-I should perform until appropriately trained personnel arrive at the scene of a hazardous materials situation. (C-1)
- 7-3.5 Break down the steps to approaching a hazardous situation. (C-1)
- 7-3.6 Discuss the various environmental hazards that affect EMS. (C-1)
- 7-3.7 Describe the criteria for a multiple-casualty situation. (C-1)
- 7-3.8 Evaluate the role of the EMT-I in the multiple-casualty situation. (C-3)
- 7-3.9 Summarize the components of basic triage. (C-1)
- 7-3.10 Define the role of the EMT-I in a disaster operation. (C-1)
- 7-3.11 Describe basic concepts of incident management. (C-1)
- 7-3.12 Explain the methods for preventing contamination of self, equipment and facilities, (C-1)
- 7-3.13 Review the local mass casualty incident plan. (C-1)
- 7-3.14 Describe the purpose of the NIIMS Incident Command System. (C-1)

#### Affective Objectives

No affective objectives identified.

#### **Psychomotor Objectives**

7-3.15 Given a scenario of a mass casualty incident, perform triage. (P-2)

#### **Special Operations**

8-1.1 Describe the basic requirements for confined space training for EMS personnel as outlined in 29 CFR, Part 1910. (C-1)

# **Appendix A**

## Written pretest

The following examination should be administered to bridge course candidates no less than 30 days before the first day of class. Scores should then be compiled and analyzed to customize the class.

The questions are broken down as follows:

Topic	Question numbers
Lesson 1-1 Introduction To EMS Systems	1-2
Lesson 1-2 The Well-Being Of The ETT:	3-4
Lesson 1-3 Legal And Ethical Issues:	5-8
Lesson 1-4 The Human Body	9-13
Lesson 1-5. Lifting and Moving Patients:	14-15
Module 2: Airway:	16-28
Lesson 3-1: Cardiopulmonary Resuscitation:	29-37
Module 4: Patient Assessment	38-47
Lesson 5-1 Bleeding And Soft Tissue Injuries:	48-53
Lesson 5-2 Shock	54-61
Lesson 5-3 Injuries To Muscles And Bones	62-68
Module 6: Medical Emergencies	69-78
Module 7: Pediatrics	79-85
Module 8: Environmental Emergencies	
Frostbite	86-88
Hypothermia	89-93
CWND	94-96
Heat	97-100

# ETT to EMT-1 Bridge Course Admission Screening Examination

- 1. Primary responsibilities of an ETT include
  - a. personal safety
  - b. rescuers' safety
  - c. patient treatment
  - d. all of the above
- 2. A written list of directions from your physician sponsor is called:
  - a. medical direction
  - b. standing orders
  - c. on-line medical direction
  - d. registration
- 3. It is important to use body substance isolation techniques
  - a. only when blood is present
  - b. only when you are transporting
  - c. for all body fluid contact
  - d. only if you will have direct contact with the patient
- 4. Critical Incident Stress:
  - a. is seldom seen by ETTs
  - b. is an occupational hazard for ETTs
  - c. goes away on its own
  - d. results after every incident
- 5. Cases of suspected child abuse must be reported to
  - a. Abused women's aid in crisis(AWAIC)
  - b. Drug awareness and resistance education (DARE)
  - c. Professional teachers practices act (PTPA)
  - d. Division of Family and Youth Services (DFYS)
- 6. Comfort One or DNR (do not resuscitate) orders allow the ETT to
  - a. withhold care with proper orders
  - b. provide care without proper orders
  - c. transport with a doctor's orders
  - d. withhold transport with nurse's orders

7.	What kind of consent do you need to obtain before providing care for the competent, conscious injured adult?
	<ul> <li>a. implied consent</li> <li>b. applied consent</li> <li>c. actual consent</li> <li>d. consent is not necessary</li> </ul>
8.	The most important element of consent and or refusal is:
	<ul><li>a. ability to understand</li><li>b. witnesses</li><li>c. signature</li><li>d. legal age</li></ul>
9.	An imaginary line that runs vertically through the patient's body is:
	<ul><li>a. posterior</li><li>b. proximal</li><li>c. lateral</li><li>d. midline</li></ul>
10.	How would you describe the location of the head in relation to the chest?
	<ul><li>a. superior</li><li>b. inferior</li><li>c. proximal</li><li>d. distal</li></ul>
11.	The bones of the lower leg are the
	<ul><li>a. fibula and tibia</li><li>b. tibia and phalanges</li><li>c. fibia and radius</li><li>d. fibula and femur</li></ul>
12.	The major muscle used in breathing is the
	<ul><li>a. gluteus maximus</li><li>b. triceps</li><li>c. latissimus dorsi</li><li>d. diaphragm</li></ul>
13.	If a pain begins at the wrist and travels towards the elbow, what direction is it moving?
	<ul><li>a. proximal</li><li>b. distal</li><li>c. medial</li><li>d. lateral</li></ul>

14.	For which of the following victims is an emergency move required?
	a. is in an active slide path
	<ul><li>b. is severely short of breath</li><li>c. in street-traffic controlled</li></ul>
	d. grossly deformed lower extremities
15.	When lifting an object from below the waist, the lifter should bend at the:
	a. arms
	<ul><li>b. legs</li><li>c. back</li></ul>
	d. waist
16.	The tube that goes from the mouth to the lungs is the:
	a. esophagus
	<ul><li>b. alveoli</li><li>c. venule</li></ul>
	d. trachea
17.	Which adult respiratory rate is ABNORMAL?
	a. 20
	b. 17 c. 12
	d. 7
18.	A 33 year old male was involved in a pedestrian/motor vehicle accident and has obvious trauma to the head. The best method for opening the airway is:
	a. modified jaw thrust
	<ul><li>b. head-tilt, neck lift</li><li>c. head-tilt, chin-lift</li></ul>
	d. modified neck lift
19.	Over-ventilation of a patient may cause:
	a. lung damage
	<ul><li>b. gastric distension</li><li>c. acidosis</li></ul>
	d. tracheal swelling
20.	When suctioning, the ETT should:
	a. not move the catheter tip
	b. move the catheter tip
	<ul><li>c. stop after 5 seconds</li><li>d. only suction on insertion</li></ul>

- 21. Sudden inability to cough, breath and speak are signs of:
  - a. asthma
  - b. anaphylaxis
  - c. partial airway obstruction
  - d. foreign body airway obstruction
- 22. When maintaining an airway in the one year old patient, it is important to:
  - a. hyperflex the neck
  - b. hyperextend the neck
  - c. neutrally align the neck
  - d. hypoflex the neck
- 23. What position is most useful for maintaining mouth drainage by gravity and for keeping a patient in a stable position?
  - a. rescue
  - b. recovery
  - c. airway
  - d. immobilized
- 24. Your patient is a 23 year old female removed from a burning building by firefighters. Your first priority is to:
  - a. check her airway
  - b. .perform a detailed assessment
  - c. cover the burns
  - d. estimate the percentage of burned area
- 25. An unconscious head injury patient with shallow, irregular respirations at 4 per minute should be:
  - a. ventilated once every 5 seconds
  - b. transported slowly to prevent further brain injuries
  - c. transported face down to prevent aspiration of blood
  - d. cooled rapidly to decrease the body's oxygen use
- 26. You have a patient who is coughing up bright red frothy blood. The best treatment for this patient would include:
  - a. avoiding the administration of oxygen even if trained to use oxygen
  - b. placing the patient in the shock position
  - c. compressing the chest to promote clotting
  - d. placing the patient in the position of comfort
- 27. Airway positioning maneuvers and artificial airways are designed to:
  - a. provide a direct route to the lungs
  - b. stimulate spontaneous breathing
  - c. protect against vomiting
  - d. remove the tongue from the throat

28.	Which statement is true about foreign body airway obstruction in an infant?
	<ul> <li>a. chest thrusts are avoided because of the potential for damaging internal organs</li> <li>b. blind finger sweeps are not performed</li> <li>c. attempt to clear the obstruction before trying to ventilate</li> <li>d. most airway obstructions are caused by infectious diseases, such as epiglottitis</li> </ul>
29.	When performing CPR on an adult, the rescuers should compress the chest:

- b.  $1\frac{1}{2}$  to 2 inches
- c. ½ inch
- d. 2 3 inches

#### 30. The best treatment for sudden cardiac arrest is:

- a. artificial ventilation
- b. defibrillation
- c. oxygen
- d. rapid transport

### 31. When performing chest compressions on an infant you should use:

- a. the heel of one hand on the center chest
- b. two fingers just above the xiphoid process
- c. the heel of the hand between the nipples
- d. two fingers just below the nipples

### 32. When performing one-man adult CPR, the ratio of compressions to ventilations is:

- a. 5:1
- b. 15:1
- c. 5:2
- d. 15:2

#### 33. When performing CPR on a child, the ratio of compressions to ventilations is:

- a. 5:1
- b. 3:1
- c. 5:2
- d. 15:2

#### 34. After opening the airway on an unconscious victim, the next step is:

- a. check for breathing
- b. check for pulse
- c. check for hemorrhage
- d. start CPR

- 35. On which of the following patients should CPR not be started:
  a. heart attack down 3 minutes
  b. person electrocuted by industrial current
  c. gunshot wound to chest pulse just stopped
  d. hypothermia with ice in airway
- 36. You are performing CPR on a patient when a family member hands you a Comfort One card in the patient's name. You should:
  - a. do nothing different
  - b. stop CPR
  - c. do compressions only
  - d. transport immediately
- 37. Properly performed CPR compresses the heart between the spine and the:
  - a. sternum
  - b. ribs
  - c. xiphoid
  - d. liver
- 38. What of the following may be a hazard to the medical responder?
  - a. a domestic call
  - b. spilled gasoline
  - c. a rolled over vehicle
  - d. any of the above
- 39. If the number of patients exceeds the number of responders, you should first:
  - a. call for assistance
  - b. begin triage
  - c. assist those who are unconscious
  - d. use those less injured to assist
- 40. What is it called when you first observe the patient to get an idea of his problems and needs?
  - a. general impression
  - b. scene size-up
  - c. initial assessment
  - d. focused assessment
- 41. An initial exam should be done:
  - a. before the focused exam
  - b. after the detailed exam
  - c. before the scene size-up
  - d. before the general impression

42.	If a patient responds by moving around in response to a painful stimulus but does not answer your questions, he is said to be:
	<ul> <li>a. A = alert</li> <li>b. V = responsive to voice</li> <li>c. P = responsive to pain</li> <li>d. U = unresponsive</li> </ul>
43.	The initial examination is designed to identify:
	<ul> <li>a. hazards to the rescuer</li> <li>b. all injuries</li> <li>c. deformities</li> <li>d. life threats</li> </ul>
44.	In the SAMPLE history, the A and M stand for:
	<ul> <li>a. allergies, medication</li> <li>b. alleviation, MOI</li> <li>c. aggravation, motor</li> <li>d. allergies, MOI</li> </ul>
45.	A blood pressure cuff should be placed so that:
	<ul> <li>a. it wraps around the elbow</li> <li>b. its lower edge is about 1 inch above the elbow</li> <li>c. it is centered on the forearm</li> <li>d. its air bladder is over the back of the arm</li> </ul>
46.	Vital signs in the unstable trauma patient should be obtained every:
	<ul> <li>a. 5 minutes</li> <li>b. 15 minutes</li> <li>c. 10 minutes</li> <li>d. 30 minutes</li> </ul>
47.	Your unconscious patient was crushed by a falling object that rolled off him. Choose the appropriate assessment:
	<ul> <li>a. focused</li> <li>b. rapid</li> <li>c. ongoing</li> <li>d. detailed</li> </ul>

- a. use body substance isolation precautions
- b. control the bleeding before opening the airwayc. perform the focused exam first
- d. call for assistance

- 49. How do you treat an open abdominal wound with intestines showing? a. cover it with a blanket b. cover it with moist, sterile dressings and plastic c. cover it with plastic only d. leave it uncovered 50. When covering a soft tissue wound, what goes directly against the wound? a. an ace bandage b. non-sterile Kerlix c. bandages d. dressings If you arrive within minutes of when a patient was burned by a campfire, you should: 51. a. apply aloe vera b. cool with water c. apply burn salve d. wrap tightly in bandages 52. An open wound to the chest should have what applied: a. big bulky dressing securely applied b. sterile saline moistened dressing c. occlusive dressing taped on three sides d. sterile dressing moistened and covered with aluminum foil 53. The first step in controlling arterial bleeding is a. direct pressure b. positive pressure c. pressure point d. tourniquet 54. A patient appears to be in severe shock without any obvious cause. You would suspect a. external bleeding b. psychogenic shock
  - c. stroke
  - d. internal bleeding
- 55. Signs of shock in an adult include:
  - a. pale, cool, clammy skin
  - b. fruity smell on breath
  - c. unequal pupils
  - d. slowing pulse rate

56. Which set of vital signs is most likely to be seen in a patient in shock from blood loss?

Bl	ood pressure	Pulse		Respi	irations	
a.	90/60		130		26	
b.	100/70		80			12
c.	104/84		110		18	
d.	160/100	130		20		

- 57. Shock can be caused by:
  - a. loss of fluid
  - b. decreased pumping ability of the heart
  - c. dilation (relaxation) of blood vessels
  - d. any of the above
- 58. In hemorrhagic shock, the patient's skin will usually be:
  - a. warm and moist
  - b. warm and dry
  - c. cool and moist
  - d. cool and dry
- 59. Which of the following cause inadequate perfusion
  - a. hypovolemia
  - b. heart failure
  - c. anaphylaxis
  - d. all of the above
- 60. Which of the following sets of vital signs represents decompensated shock in an adult?

Blo	ood pressure	Pulse	Respirations	
a.	120/78	128	18	
b.	114/72	90		12
c.	98/60	130	28	
d.	96/40	76		14

- 61. An early sign of shock is:
  - a. coma
  - b. fast heart rate
  - c. low blood pressure
  - d. slow capillary refill
- 62. A painful and swollen extremity might be:
  - a. a fracture
  - b. a dislocation
  - c. a sprain
  - d. any of the above

	<ul> <li>a. a criminal act</li> <li>b. a neck injury</li> <li>c. alcohol use</li> <li>d. a chest injury</li> </ul>
64.	When strapping the patient to a long board, strap:  a. the head and then the body  b. the arms and then the legs  c. the body and then the head  d. the most injured area first
65.	A splint should immobilize:  a. above the injury  b. at the site of the injury  c. below the injury  d. all of the above
66.	A patient has open fractures of the humerus and femur and is in severe shock. You should splint the humerus:  a. during the initial exam b. during the focused exam c. before obtaining a pulse in the arm d. while transporting
67.	Pelvic injuries are best stabilized by use of:  a. a ladder splint b. towel rolls c. MAST/PASG d. a KED
68.	A traction splint should be used for fractures of the:  a. hip b. ankle c. tibia d. femur
69.	In an adult, all of the following are signs of respiratory problems EXCEPT:  a. wheezing b. rates between 12 and 20 c. cyanosis d. rapid breathing

63.

If a patient has a significant head injury, suspect:

- 70. Pain from a heart attack may most commonly radiate to the:
  - a. back
  - b. rib cage
  - c. arm
  - d. right lower quadrant
- 71. A known epileptic is experiencing a seizure. Appropriate care includes:
  - a. rushing the patient to the hospital
  - b. restraining the patient until it passes
  - c. placing a spoon or stick in the patient's mouth
  - d. protecting the patient from injury
- 72. If a patient is unconscious and lying on his back after a seizure, you should:
  - a. treat him for shock
  - b. provide painful stimuli until he awakens
  - c. place him on a backboard
  - d. roll him onto his side
- 73. In all cases of diabetic emergency, the first step is:
  - a. assure an open airway
  - b. give sugar
  - c. provide oxygen
  - d. transport
- 74. Your patient who is a known diabetic has suddenly started acting strange. He is now drinking from a water bottle. Appropriate treatment is:
  - a. give him his insulin
  - b. help him drink fruit juice with sugar added
  - c. give him a diet soda
  - d. help him drink activated charcoal
- 75. What is the most serious problem that can occur in a patient who has inhaled a poison?
  - a. spinal fractures
  - b. vomiting
  - c. airway and breathing problems
  - d. head injuries
- 76. You are treating a 42 year old male who states he has crushing pain in his chest. In addition to keeping him calm, you should:
  - a. help him walk to his car so he can drive himself to the clinic or hospital
  - b. assist your crew in carrying him to the vehicle in which he will be transported
  - c. keep him lying flat with his feet elevated 12 inches
  - d. give him orange juice mixed with sugar, or some other sweet drink

- 77. Your 22 year old female patient is complaining of severe lower abdominal pain that increased in intensity over the last 12 hours. The skin is pale and moist. Her pulse is fast. You should:
  - a. give her sips of water and recheck in two hours
  - b. give her two ibuprofen and see how she feels tomorrow
  - c. place and inflate all compartments of the PASG
  - d. place in position of comfort and transport
- 78. Your patient is unconscious and unresponsive. He is a known diabetic. You should:
  - a. elevate the legs and continue assessment
  - b. give instant glucose by mouth
  - c. protect the airway and transport
  - d. apply the AED and press analyze
- 79. Which statement is true about foreign body airway obstruction in an infant found unconscious?
  - a. chest thrusts are avoided because of the potential for damaging internal organs
  - b. attempt to clear the obstruction before trying to ventilate
  - c. blind finger sweeps are **not** performed
  - d. most airway obstructions are caused by infectious diseases, such as epiglottitis
- 80. You are treating a four year old patient who has a cough, fever, and difficulty breathing. He is sitting upright in bed, drooling, and appears to be very anxious You should:
  - a. gently transport the patient to a medical facility without examining the back of the throat
  - b. examine the back of the throat with a tongue blade
  - c. rapidly treat the patient for a foreign body airway obstruction
  - d. insert an oropharyngeal airway and administer high flow oxygen if trained to do so
- 81. In a child, low blood pressure associated with shock is:
  - a. an unlikely finding
  - b. a predictor of good outcome
  - c. an early sign
  - d. a late sign
- 82. In general when assessing children the ETT should:
  - a. use a head to toe approach
  - b. use a toe to head approach
  - c. not assess the injured area
  - d. asess the injured area first
- 83. Your three year old patient being held by Mom has difficulty breathing. You should:
  - a. remove child from Mom's arms and lie supine
  - b. remove child from Mom's arms and place in sniffing position
  - c. leave child in Mom's arm's and continue assessment and treatment
  - d. leave child in Mom's arms and immediately transport

- 84. When compared to an adult airway the child's tongue occupies:
  - a. relatively the same space
  - b. relatively more space
  - c. relatively less space
  - d. relatively no space
- 85. What is the most common cause of cardiac arrest in children?
  - a. respiratory problems
  - b. heart disease
  - c. epiglottitis
  - d. ventricular fibrillation
- 86. One of the most important rules for treating frostbite is to:
  - a. rewarm using water at normal body temperature
  - b. protect the thawed part from refreezing
  - c. start rewarming only if you feel a pulse in the extremity
  - d. keep the rewarmed extremity below room temperature to decrease oxygen consumption
- 87. The blisters that may form after a frozen body part has been rewarmed should:
  - a. be punctured and then carefully bandaged
  - b. not be punctured or bandaged
  - c. not be punctured but should be bandaged to protect from further injury
  - d. be punctured and allowed to drain without bandaging them
- 88. Frostbitten toes that have been thawed out should be:
  - a. left unbandaged
  - b. dressed with sterile dressing between the toes
  - c. kept lower than the heart
  - d. exercised by walking
- 89. For the hypothermic patient, warm fluids may be given by mouth when:
  - a. the patient is able to swallow and protect his airway
  - b. the patient's body temperature is between 80 and 90 degrees
  - c. the patient is severely hypothermic and is alert only to pain
  - d. no other means of rewarming is possible
- 90. Which statement about hypothermia is true?
  - a. it is important to prevent further heat loss
  - b. hypothermia should be treated with hot packs applied directly to the skin
  - c. severely hypothermic patients should be rewarmed in a bath of warm water
  - d. frostbite is an early sign of hypothermia

- 91. A good way to tell the difference between mild and severe hypothermia is:
  - a. the mental status is normal in mild hypothermia
  - b. the mental status is abnormal in mild hypothermia
  - c. the vital signs are abnormal in mild hypothermia
  - d. the vital signs are normal in severe hypothermia
- 92. Select the appropriate rewarming technique for severe hypothermia:
  - a. food and exercise
  - b. hot baths
  - c. whisky shots
  - d. sleeping bag with buddy
- 93. Aggressive rewarming is indicated for the:
  - a. mildly hypothermic patient
  - b. severely hypothermic patient
  - c. unconscious hypothermic patient
  - d. hypothermic patient with no vital signs
- 94. Resuscitation should be attempted for the cold water near drowning patient if he or she has been submerged for:
  - a. more than one hour
  - b. less than one hour
  - c. less than two hours
  - d. less than 30 minutes
- 95. Which of the following statements about cold water near drowning is true?
  - a. hypothermia is the major problem in submersion incidents
  - b. CPR has little effect on outcome when started early
  - c. all patients who lose consciousness should be transported to the hospital
  - d. patients under water for more than 20 minutes have no chance for survival
- 96. CPR for the cold water near drowning victim:
  - a. should be preceded by the Heimlich maneuver
  - b. should be performed gently
  - c. is contraindicated
  - d. should be started after checking the pulse for 45 seconds
- 97. The heatstroke patient will have:
  - a. dry skin
  - b. moist skin
  - c. altered mental status
  - d. core temperature of 100°F

- 98. Heatstroke can best be treated by:
  - a. rapid cooling
  - b. slow cooling
  - c. tepid water by mouth
  - d. none of the above
- 99. The best treatment for heat exhaustion is:
  - a. rapid cooling
  - b. rest and oral fluids
  - c. icepacks to groin
  - d. food and exercise
- 100. The major problem in heat exhaustion is:
  - a. body temperature incompatible with life
  - b. weakness
  - c. thirst and hunger
  - d. vasodilation and sweating

# **Appendix B**

# **Practical pretest**

Each student must test the following stations:

- patient assessment,
- splinting,
- bleeding control and shock management,
- airway management and
- spinal immobilization.

# Physical Assessment – Medical and Trauma

**OBJECTIVE**: The student will demonstrate the ability to correctly perform a thorough physical assessment and perform appropriate patient care.

**EQUIPMENT**: Penlight, BP cuff, stethoscope, notepad, watch with a second hand, patient, trained bystander to assist with logroll.

**PERFORMANCE CRITERIA AND CONDITIONS**: The candidate will be presented with a patient who is responsive only to pain and will be told to perform a complete physical assessment. 100% accuracy on key points (indicated by \*) is necessary for acceptable performance.

Event	Does	Does Not
Take <b>proper</b> body substance isolation precautions.	*	
Scene Size Up		
2. Determine that scene is safe.	*	
3. Identify and state the mechanism of injury/nature of illness.		
4. Determine and state number of patients.		
5. Request additional help, if necessary.		
6. Consider stabilization of the cervical spine, if unresponsive or mechanism of injury indicates.	*	
Initial Assessment		
7. Form a general impression of patient (sick, not sick). [In the classroom setting state aloud.]		
8. Determine and state level of consciousness.(AVPU)		
Determine and state chief complaint.		
10. Assess AIRWAY and correct immediate life threats.	*	
11. Assess <b>BREATHING</b> (absent, present, normal, fast or slow) and correct immediate life threats. Direct initiation of <b>ventilations</b> , with supplemental oxygen, as appropriate, or the administration of <b>high flow oxygen</b> via nonrebreather mask.	*	
12. Check <b>PULSE</b> (absent, present, normal, fast, or slow) and initiates CPR if necessary.	*	
13. Assess for and control, life-threatening <b>HEMORRHAGE</b> .	*	
14. Do items 11-14 in order.	*	
15. Assess skin color, temperature, and condition.		
16. Identify priority patients and make appropriate transport decision.	*	
17. Obtain or direct an assistant to get a baseline set of vital signs, (Blood pressure, Pulse, and Respirations).		
18. Select and perform appropriate assessment. (Focused or Detailed).		

# **Focused History and Focused Physical Examination**

Focused History and Focused Physical Examination	Does	Does Not
18. Assess illness and condition based on chief complaint using OPQRST.		
19. Obtains SAMPLE history.		
20. Inspect and palpate areas based on chief complaint.		
21. Properly package and transport if needed.		
22. Reassess vital signs, (Blood pressure, Pulse, and Respirations). Repeat every 5 minutes if patient is unstable, repeat every 15 minutes if the patient is stable.		
23. A detailed exam is not necessary unless suggested by the information obtained above.		

# **Detailed Physical Exam**

Event	Does	Does Not
18. Inspect and palpate the head for DOTS including: The mouth-obstructions, blood or mucus, odors, The nose-singed nasal hairs, obstructions, blood or mucus, The ears-blood or clear fluid in the canal and behind the ears.		
19. Inspect the eyes, including pupils (PERL).		
20. Inspect and palpate the neck for DOTS.		
21. If appropriate, apply or direct the application of appropriate sized cervical collar, (may be done any time during the assessment).		
22. Inspect and palpate chest for DOTS.		
23. Assess presence of breath sounds bilaterally.		
24. Inspect and palpate abdomen for DOTS.		
25. Inspect and palpate pelvis for DOTS.		
26. Inspect and palpate all four extremities for DOTS.		
27. Assess pulse, movement and sensation in each extremity.		
28. Roll patient using spinal precautions, inspect and palpate the entire back, place onto backboard if necessary.		
29. Re-assess vital signs, (Blood pressure, Pulse, and Respirations).		
Management-Medical		
30. Oxygen, if trained and patient condition indicates the need.	*	
31. Position of comfort.		
32. Transport patient (if not already in the process).		
Management-Trauma		
33. Oxygen, if trained and patient condition indicates the need.	*	
34. If trained, and patient condition indicates, apply and inflate PASG at an	*	

Event	Does	Does Not
appropriate time to maintain systolic BP of at least 90 mmHg.		
35. Manages all injuries and wounds appropriately.		
36. Maintains cervical spine and spinal alignment throughout, if indicated.	*	
37. Transport patient (if not already in the process).		
Ongoing Assessment		
38. Repeats initial assessment. (LOC, AIRWAY, BREATHING, CIRCULATION).		
39. Re-assess vital signs (Blood pressure, Pulse, and Respirations) repeat every 5 minutes if patient is unstable, repeat every 15 minutes if the patient is stable.		
40. Re-assess all interventions.		

# **External Bleeding Control**

OBJECTIVE: Demonstrate the ability to evaluate and control external hemorrhage while adhering to body substance isolation precautions.

**EQUIPMENT**: Clean dressing, blood pressure cuff, stethoscope, penlight, bandaging supplies, a tourniquet, and examination gloves.

PERFORMANCE CRITERIA AND CONDITIONS: The candidate will be presented with a patient with simulated arterial bleeding on an extremity.

Event	Does	Does Not
Take <b>proper</b> body substance isolation precautions.	*	
2. Explain procedure in progress to patient.		
3. Apply and maintain direct pressure on wound site using sterile dressings, apply additional dressings if necessary.		
4. Elevate extremity above the level of the heart.		
5. If hemorrhage continues, compress artery at appropriate proximal pressure point with at least two fingers, while maintaining elevation.		
6. Evaluate treatment.		
7. Steps 3,4,5, and 6 completed in order and within 45 seconds. 1 2	*	
8. Appropriate dressings and bandages are applied, using firm pressure, or a pressure bandage.		
9. Monitor patient for recurrent hemorrhage.	*	
10. Check pulse distal to the injury.		
11. Assess patient, obtain vital signs and treat for shock if necessary.		

<sup>&</sup>lt;sup>1</sup> Steps 2,3, and 4 may be completed simultaneously. <sup>2</sup> This time line is for testing purposes only.

## **Basic Shock Treatment**

**OBJECTIVE**: Demonstrate proper evaluation and basic treatment of the patient in hypovolemic shock.

**EQUIPMENT**: Blood pressure cuff, stethoscope, blankets, free flow oxygen delivery system, something with which to elevate patient's feet, non-rebreather mask.

**PERFORMANCE CRITERIA AND CONDITIONS**: The candidate will be presented with a patient exhibiting signs and symptoms of hypovolemia or relative hypovolemia. Vital signs will be given to the student as they are taken.

Event	Does	Does Not
Take <b>proper</b> body substance isolation precautions.	*	
2. Determine and state level of consciousness, (AVPU).		
3. Communicate with and reassure patient.		
4. Place patient in supine position.		
5. Initiate oxygen flow at 15 liters per minute via non-rebreather mask.	*	
6. Elevate patient's legs 8-12 inches.		
7. Maintain patient's body temperature.		
8. Take baseline blood pressure, pulse, and respirations.		
9. Identify priority patients and make appropriate transport decision.	*	

# **Bandaging and Splinting of an Open Fracture**

**OBJECTIVE:** The student will demonstrate the ability to correctly bandage and splint an open fracture.

**EQUIPMENT:** Sterile 4" x 4"s, splint padding; Kerlix, Kling, sterile water or normal saline, appropriate splints, examination gloves, patient, 1 EMT/ETT trained assistant.

**PERFORMANCE CRITERIA AND CONDITIONS:** The candidate will be presented with an alert and oriented patient with an open fracture of the tibia. The candidate must bandage and splint the injury with the help of a trained assistant.

Event	Does	Does Not
Take <b>proper</b> body substance isolation precautions.	*	
2. Explain the procedure to the patient.		
3. Expose the injured extremity.	*	
4. Instruct the assistant to immobilize the extremity without applying traction.		
5. Check pulse, movement, and sensation distal to the injury.	*	
6. Apply and secure a sterile dressing to the wound.		
7. Select and appropriate splint, padding splint if necessary.		
8. Instruct the assistant in placing the splint. Working together, gently lift the injured extremity while supporting the entire fractured bone. Place the splint under the injured extremity.		
9. Secure the splint without taping or wrapping bandages over the wound site.		
10. Immobilize the joint above, the joint below, and the fracture site.	*	
11. Recheck the pulse, movement, and sensation distal to the injury.	*	

## **Bag-Valve-Mask Resuscitator-Two Rescuer Method**

**OBJECTIVE**: Demonstrate the ability to adequately ventilate a patient using a bag-valve-mask resuscitator.

**EQUIPMENT**: Bag-valve-mask resuscitator, intubation manikin, examination gloves, and the correct size of oropharyngeal airway and/or nasopharyngeal airways. Oxygen reservoir, oxygen connecting tubing, and oxygen source with variable flow regulator.

**PERFORMANCE CRITERIA AND CONDITIONS**: The candidate will be presented with a simulated patient who is in respiratory arrest. The candidate will perform pulmonary ventilation for at least two minutes.

Event	Does	Does Not
Take <b>proper</b> body substance isolation.	*	
Assemble bag-valve-mask resuscitator correctly.		
3. Connect bag-valve-mask resuscitator to oxygen source.		
4. Open tank valve slowly.		
5. Confirm that adequate pressure exists in the tank.		
4. Deliver oxygen at rate of 15 liters per minute. Oxygen flow must be sufficient to insure inflation of reservoir bag.	*	
5. Effectively open the airway.		
6. Correctly insert oropharyngeal or nasopharyngeal airway.		
7. The candidate must place mask over patient's mouth and nose and ensure a proper seal, while maintaining an open airway.		
8. Instruct assistant to compress bag at a rate of at least 12 times per minute.	*	
9. Ensure adequate volume and exhalation between ventilations as evidenced by rise and fall of chest.	*	
10. Maintained an open airway throughout.	*	

# **Spinal Immobilization - Supine Patient**

**OBJECTIVE**: The student will demonstrate the proper technique for applying the cervical collar, log rolling a patient onto the spine board, and securing the patient to the spine board.

**EQUIPMENT**: Cervical collars, long board, straps, blankets, 2" - 3" tape, towels or bulky dressing, Kerlix, patient, 2 EMT/ETT trained assistants.

**PERFORMANCE CRITERIA AND CONDITIONS**: The candidate will be presented with a patient with a suspected spinal injury.

Event	Does	Does Not
Take <b>proper</b> body substance isolation.	*	
2. Explain events to the patient.		
3. Ensure that the patient's head is in a neutral in-line position, manually immobilized until secured to the long board.	*	
4. Check for pulse, movement, and sensation in all four extremities.	*	
5. The ETT should select and apply the cervical collar. The collar must be securely applied under the chin of the patient without compromising the c-spine or the airway.	*	
6. Explain entire procedure, step by step, for placing patient on long board to assistants.		
7. Direct an assistant to place the long board close to the patient.		
8. Direct the other assistants to assume positions on the side of the patient opposite the long board.		
9. Working as a unit, the ETT and assistants roll the patient toward them on the command of the person maintaining the neutral in-line position of the cervical spine.	*	
10. Assess the entire back of the patient while turned on the side.		
11. Instruct an assistant to slide the long board close to the patient.		
12. Working as a unit, on command of the person controlling the patient's head, the patient is rolled onto the long board.	*	
13. As a unit the patient is centered on the long board.		
14. Ensure that the patient is secured to the long board with straps securing the chest, hips, and legs.		
15. The patient's head is stabilized in a neutral position and secured to the long board <b>last</b> using a horseshoe blanket roll or other head immobilizer.	*	
16. Reassess pulse, movement, and sensation in all four extremities.	*	
17. The patient is secured to the long board without excessive movement throughout the entire procedure.	*	

# **Appendix C**

# **Topics and Hours table**

Note: The table below should be used to allocate topic times according to class needs as determined through pre-testing. Time in this table does not include quizzes or other in class tests. It is also not inclusive of general review, homework review, etc. Additional time must be added to accommodate these important items.

Module/Lesson	DOT	Bridge Pilot	Custom Bridge
Preparatory			
Introduction to emergency medical care	1.5	1	
Well-Being Of The EMT-I	1.5	1	
Medical/legal and ethical issues	1.5	1	
The human body	2.5	1.5	
Baseline vital signs and sample history	2	1.5	
Lifting and moving patients	3	2	
CPR objectives		1	
Airway			
Airway	4	4	
Airway lab	2	2	
Patient assessment			
Scene size-up	0.5	0.5	
Initial assessment	1	0.5	
History and physical exam - trauma patients	4	2	
History and physical exam - medical patients	2	1.5	
Detailed physical exam	1	1	
On-going assessment	1	0.5	
Communications	1	1	
Documentation	1.5	1	
Assessment lab	8	4	
Medical			
General pharmacology	1	1	
Respiratory emergencies	2.5	2	
Cardiovascular emergencies	7	4	
Diabetes/altered mental status	2	1.5	
Allergies	2	2	
Poisoning/overdose	2	2	
Environmental emergencies	2	2	
Behavioral emergencies	1.5	1.5	
Obstetrics/gynecology	2	2	
Medical lab	8	4	
Trauma			
Bleeding and shock	2	2	
Soft tissue injuries	2	2	
Musculoskeletal care	4	2	
Injuries to the head and spine	4	3	
Trauma lab	6	4	
Infants and children			
Infants and children	3	4	
Infants and children lab	3	2	
Operations			
Ambulance operations	1	1	
Gaining Access	1	1	
Overviews	2	2	
Scenario practice (putting it all together)		8	
Total hours	92	80	0
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# **Appendix D**

# Sample Course Schedule

The attached schedule for ten eight hour days is a guide for instructors when developing their bridge course.

Date: Day one

Time	Elapsed	Topic/Activity	Instructor	Notes
0800-0830	30 min	Introduction/paperwork		Pass out syllabus, text,
				handouts
0830-0930	60 min	Introduction to emergency medical		
		care		
0930-1030	60 min	Well-Being Of The EMT-I		
1030-1200	90 min	The Human Body		
1200-1300	60 min	Lunch		
1300-1500	120 min	Lifting and moving patients		Lecture and skill practice
1500-1600	60 min	Medical/legal and ethical issues		
1600-1700	60 min	Baseline vital signs and sample		Review and skill practice
		history		

Date: Day Two

Time	Elapsed	Topic/Activity	Instructor	Notes
0800-0930	90 min	Airway review		
0930-1200	150 min	Airway skills practice		
1200-1300	60 min	Lunch		
1300-1330	30 min	Vital signs practice		
1330-1530	120 min	Airway skills practice		
1530-1630	60 min	General pharmacology		

Date: Day Three

Time	Elapsed	Topic/Activity	Instructor	Notes
0800-0830	30 min	Scene size up		
0830-0900	30 min	Initial assessment		
0900-1000	60 min	History and physical exam -		
		trauma patients		
1000-1100	60 min	Trauma H&P practice		
1100-1145	45 min	History and physical exam -		
		medical patients		
1145-1245	60 min	Lunch		
1245-1330	45 min	Medical H&P practice		
1330-1430	60 min	Detailed physical exam		
1430-1500	30 min	On-going assessment		
1500-1600	60 min	Communications		review and practice
1600-1700	60 min	Documentation		review and practice

Date: Day Four

Time	Elapsed	Topic/Activity	Instructor	Notes
0800-0900	60 min	Respiratory emergencies		
0900-1000	60 min	Respiratory skills practice		
1000-1100	60 min	Allergies lecture		
1100-1200	60 min	Allergies skill practice		
1200-1300	60 min	Lunch		
1300-1430	90 min	Cardiovascular emergencies		
1430-1700	150 min	Cardiovascular skills practice		

Date: Day Five

Time	Elapsed	Topic/Activity	Instructor	Notes
0800-0930	90 min	Diabetes/altered mental status		Lecture and practice
0930-1030	60 min	Poisoning/overdose lecture		
1030-1130	60 min	Poisoning scenarios		
1130-1230	60 min	Behavioral emergencies		
1230-1330	60min	Lunch		
1330-1400	30 min	Behavioral Scenarios		
1400-1500	60 min	Obstetrics/gynecology lecture		
1500-1600	60 min	OB/GYN scenarios		
1600-1700	60 min	Environmental emergencies		
		lecture		

Date: Day Six

Time		Tania / A ativity	Instructor	Matas
Time	Elapsed	Topic/Activity	Instructor	Notes
0800-0900	60 min	Bleeding and shock lecture		
0900-1000	60 min	Bleeding and shock skill		
		practice		
1000-1100	60 min	Soft tissue injuries lecture		
1100-1200	60 min	Soft tissue injuries skill		
		practice		
1200-1300	60 min	Lunch		
1300-1400	60 min	Environmental Scenarios		
1400-1430	30 min	Musculoskeletal injuries		
		lecture		
1430-1600	90 min	Splinting practice		
1600-1700	60 min	Head and spine injuries lecture		

Date: Day Seven

Time	Elapsed	Topic/Activity	Instructor	Notes
0800-1000	120 min	Spinal splinting skills practice		
1000-1200	120 min	Trauma scenarios		
1200-1300	60 min	Lunch		
1300-1700	240 min	Trauma scenarios		

Date: Day Eight

Time	Elapsed	Topic/Activity	Instructor	Notes
0800-1000	120 min	Infants and children lecture		
1000-1200	120 min	Infant and children skill		Assessment, Airway,
		practice		immobilization
1200-1300	60 min	Lunch		
1300-1500	120 min	Infant and child scenarios		
1500-1600	60 min	Ambulance operations lecture		
1600-1700	60 min	Gaining access lecture		

Date: Day Nine

Time	Elapsed	Topic/Activity	Instructor	Notes
0800-0900	60 min	CPR scenarios		
0900-1100	120 min	Patient assessment scenarios		figure out the problem
1100-1200	60 min	Overviews		Haz-Mat/MCI
1200-1300	60 min	Lunch		
1300-1400	60 min	Triage drill		
1400-1700	180 min	MCI scenario		

Date: Day Ten

Time	Elapsed	Topic/Activity	Instructor	Notes
0800-1200	240 min	Skill practice/check-offs		
1200-1300	60 min	Lunch		
1300-1700	240 min	Final scenario		